DECLARATION

I declare that this thesis contains no material which has been accepted for the award of another higher degree or diploma in any tertiary institution nor, so far as I am aware, any material published or written by others, except where due reference is made in the text of the thesis.

Gary K. Young
15 February 1999

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Gary K. Young
15 February 1999
ABSTRACT

The aim of this thesis is to evaluate the political effects of the long-distance international commerce of the Roman Empire upon the Roman East. Two areas of possible effect are studied: first, on local societies in the East which were likely to have been affected by the trade, and second, on the policy of the imperial government in the East. Attention is given to the opinions expressed by many historians who have envisaged a strongly proactive policy toward the trade by the Romans, both at an imperial and local level. These theories are compared with the sources of data available, especially that which has recently come to light in archaeological investigation, in order to see if they are supportible from this evidence.

The thesis commences with an introductory chapter which deals with various topics essential to the understanding of the commerce. These topics include a note on the available sources and a study of the possible effect of the commerce on the economy of the Roman Empire. The chapter concludes with studies of the scope of the trade, demand for its wares, and the situation at Augustus' accession.

The study then proceeds to an area-by-area overview of the trade, detailing the commerce in Egypt, Arabia, Palmyra and Syria-Mesopotamia. In each area the conduct of the commerce and what can be known about its participants is studied from the existing evidence, with special attention given to the evidence recently uncovered in archaeological and papyrological investigations. In all four areas, any information about the effect of the trade on local social conditions and political formations is considered and evaluated. In addition, any applicable activity of the
Roman central government in the area is considered for evidence that the commerce may have influenced imperial policy.

The evidence indicates that in many cases, local political formations and economies may have been affected by the long-distance international commerce in the East. This is particularly the case where the commerce may have been a dominant factor in the local economy, such as at Palmyra and Petra. On the other hand, the evidence does not support the view that there was a strongly proactive policy on the part of the Roman government toward the eastern commerce. Roman government policy is summarised in the closing chapters, which consider the statements of Roman historians regarding the commerce, the revenue which the Romans gleaned from the trade, and other factors which may have influenced the Roman government's attitude to the trade.

From the foregoing it is concluded that the commerce may have had a significant effect on local political formations in the Roman East in some isolated instances, particularly where the income from the commerce represented a significant proportion of the local economy. However, it appears that the Roman government was only interested in the trade as a source of revenue, and took no proactive measures to encourage or direct the trade. The evidence indicates that they instead preferred to protect and exploit the developing trade with minimal interference.
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PREFACE AND ACKNOWLEDGEMENT

DIS MANIBVS

DAVID J. BETTS

MAGISTRI ET AMICI

The study of the Roman East has been a field which has experienced a great surge in interest from scholars in recent years. Scholarly interest in the study of the Roman army, the societies of the East, and many other fields has increased dramatically since the publication of G.W. Bowersock's "A Report on Arabia Provincia" in 1971, which issued a challenge to scholars to investigate this previously somewhat neglected area. One of the areas which has subsequently come under considerable attention is the study of the silk and spice trades of the Roman Empire, in which expensive goods were brought from such places as India, Arabia and Africa and carried into the Roman East, and thence to the markets of the Empire.

While certain aspects of this field have come under investigation, especially that of Roman Egypt, there have been no recent attempts to determine the political effects of the trade upon the societies of the Roman East, nor indeed to attempt a history of the trade as a whole. While the second alternative would require a great deal more time and resources than is possible for a thesis of this kind, and indeed may not be possible at all given the state of the available evidence, it should nonetheless be possible to both study the trade in the provinces of the Roman East and the ways in which it might have affected these provinces. Accordingly, this thesis is designed to
investigate the long-distance trade in the Roman East in the light of recent research, and to study the political effects of this trade, both on the societies of the East and on the Empire itself.

It is appropriate at this point to recognise the support of several individuals and organisations which have provided support of one form or another in the preparation of this thesis. Firstly, I would like to thank my supervisor, Dr. Paul Gallivan, for the support and encouragement he has provided while this project was underway, as well as the other staff and students in the School of History & Classics at the University of Tasmania. I would also like to convey my thanks to the School for the provision of a Dunbabin travel grant which allowed me to undertake a research trip to Egypt, Jordan and Syria as part of this project. In addition, I would like to thank Professors Steven Sidebotham, David Graf, David Kennedy and Tom Parker for their provision of papers, and Drs. Ghazi Bisheh and Fawzi Zayadine of the Department of Antiquities of Jordan for assisting me while I travelled in Jordan.

Finally, I would like to thank my wife Helyn and my children James, Andrew and Caitlin for their patience and support while this thesis was being prepared. Without the help and support of all these people, this work would not have been possible. Each of them has contributed to the completion of my project, and must take credit for its good points, such as they are. The mistakes, of course, remain my own.
ABBREVIATIONS

The abbreviations used in this work correspond to those used in the standard works in the field. Abbreviations for ancient works are those used in The Oxford Classical Dictionary; those for journals and periodicals are those used in L'Année philologique. Corpora of inscriptions, ostraka and papyri are cited according to the following standards: for inscriptions, Guide de l'epigraphiste (Paris 1986), G.H.R. Horsely & J.A.L. Lee “A Preliminary Checklist of Abbreviations of Greek Epigraphic Volumes” Epigraphica 56 (1994), 129-169, with modifications, and G.L. Harding An Index of and Concordance of Pre-Islamic Arabian Names and Inscriptions (Toronto 1978); for papyri and ostraka, J.F. Oates et al. Checklist of Editions of Greek and Latin Papyri, Ostraca and Tablets (BASP Supp. 7, 1992). CAH refers throughout to the second edition of the Cambridge Ancient History. Abbreviations used for specialist publications not covered in these lists are given below.

Baalshamin III C. Dunant Le Sanctuaire de Baalshamin à Palmyre III: Les inscriptions (Rome 1971).

HHS Hou Han-Shou (Annals of the Later Han Dynasty), as cited in F. Hirth China and the Roman Orient (Shanghai 1885).

IGLS L. Jalalbert, R. Mouterde et al. Inscriptions grecques et latines de Syrie (Paris 1929-).

Inv. J. Cantineau, J. Starcky, M. Gawlikowski Inventaire des inscriptions de Palmyre (Beirut 1930-).
NSIJ

V.A. Clark *A Study of New Safaitic Inscriptions from Jordan*
PhD Diss. (University of Melbourne 1980).

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I. INTRODUCTION

I.1 General Introduction

The long-distance trade in silk, spices and incense which was a feature of the eastern provinces of the Roman Empire has long attracted attention, both from scholars and in more popular literature. This is perhaps not surprising, as the images of camel caravans laden with silk and spices, fabulously rich ‘caravan cities’ and ships making the long and dangerous journey from the Red Sea to India and back in search of Indian pepper and other goods have often excited the imagination of scholar and layman alike. Indeed, a number of general studies of the eastern trade of the Roman Empire have already been made, which might bring one to question the need for this work.

Many of the studies of the trade completed earlier this century, however, place great emphasis on a view of a strongly proactive Roman policy toward the trade. Indeed, many more recent writers have followed this tendency as well. These views have put forward such ideas that the Romans tried to promote or encourage the trade, and especially to force non-Roman ‘middlemen’ out of the trade and to concentrate the trade into Roman hands. Various means have been suggested by

which this allegedly took place: either by deliberately encouraging the trade in some areas by the provision of facilities; the deliberate 'redirection' of trade routes in order to weaken the commerce in other areas; even the application of military pressure to achieve these ends. One recent study, while retreating from such an extreme view of Roman involvement in the trade, has still suggested that the provision of facilities for the commerce is indicative of a direct imperial interest in the commerce and of a proactive trade policy.²

More recently, however, such views have been challenged. In one particularly significant work on this topic, M.G. Raschke has questioned many of the assumptions which have been made about the Roman commerce with the East.³ His reappraisal of the commerce has emphasised the fact that the 'middlemen' involved in the trade were usually Romans or Roman subjects, and consequently the views which emphasise attempts to remove non-Roman 'middlemen' should be rejected. Similarly, it has been shown that the vast majority of Roman foreign policy initiatives in the East can be better understood as stemming from military aggression and aggrandisement rather than from any economic motives.⁴ While emphasising this view of imperial policy, however, scant attention has been paid to the political influence of the trade at a lower level: that is, in the communities of the Roman East itself. Some work, indeed, has been done on the significance and political effect of the trade on the

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⁴ Ibid., and see also B. Isaac The Limits of Empire: The Roman Army in the East (Oxford 1990).

Nabataean Kingdom and Palmyra, but this has generally been done against the background of the proactive view of Roman policy toward the trade.

Accordingly, in the course of this work it is proposed to study closely the various routes and communities involved in the commerce, and the commodities in which the trade was carried on. This study will examine each individual area in which the eastern trade was active, concentrating especially on any Roman foreign policy initiatives in these areas which might be construed to have been trade-related. After this, the significance of the trade to the relevant local communities will be examined by a study of the things which can be discovered about the people involved in the commerce, and the way in which local authorities acted toward the trade and its practitioners.

This work does not intend to be a comprehensive history of the eastern trade in the Roman East, but rather it tries to collect and examine evidence for the existence of various trade routes coming into and passing through the Roman East, and their significance with respect to Roman imperial policy in the area and local political formations within the Roman eastern provinces. For the purposes of this study, the "East" is defined as the territory covered by the provinces of Syria, Mesopotamia, Palaestina, Arabia and Egypt, as well as client kingdoms in this general area. The period of the study is roughly from the accession of Augustus in 31 B.C. to the abdication of Diocletian in A.D. 305. This period covers what we might call the "classical" period of the Roman eastern trade, which really ended within the fall of Palmyra in A.D. 272. The extension of the period under study to A.D. 305 allows the

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5 See Chapter III (Arabia) and IV (Palmyra) for these discussions.
examination of some of the effects of this fall, without going too far into the Late Roman / Byzantine period which saw a significant recovery of the trade as well as significant changes in the government’s treatment of it, and which therefore warrants its own separate study.

In the first chapter, the introduction, some basic background essential to the study and understanding of the trade is set out. After this general introduction, the wide variety of source material which will be used in this study is briefly surveyed, followed by an examination of models of the Roman economy which have been proposed and their relevance to the eastern commerce. After this, an overview of the trade within the Roman Empire itself is provided, concentrating on the demand for eastern goods in Rome, the types of goods which were imported, and what can be known about the volume and general conduct of the trade within the Empire. After this, a section is devoted to the trade routes which were in use at the accession of Augustus in 31 B.C.

The second chapter focuses on one of the best-attested areas of the trade, Roman Egypt. Firstly, the types and sources of the various goods of the Red Sea trade are studied, followed by an examination of the manner in which the trade goods were conveyed from the Red Sea coast through Egypt and then into Alexandria, before their shipment to the markets of the Empire. After this, the various participants in the Egyptian trade are examined, both private individuals and government officials, and a likely motivation for the involvement of the Roman government in the trade is presented. Finally, changes which occurred to the trade over the course of the period
under study are documented, and a series of conclusions about the trade in Egypt reached.

The same general outline is followed in chapter three, the study of the trade in Roman and pre-Roman Arabia. In this chapter, however, the study will be divided into two broad sections: that which deals with the trade in the Nabataean Kingdom, and that which deals with the commerce in the Roman province of Arabia which succeeded the Nabataean realm in A.D. 106. Particular emphasis will be given to ideas of a deliberate Roman weakening of the Nabataean Kingdom and their relevance to Roman government policy with respect to the trade, the possible motives for the Roman annexation of the kingdom, and the sizable military buildup which took place along the Arabian frontier after the Roman takeover and its possible relevance to the eastern commerce.

A similar outline is once again followed in chapter four, which is devoted to the study of the commerce of Palmyra. Special attention, however, is given to the high degree of importance that the trade held in Palmyra and to some of the effects which the commerce may have had on Palmyra's political organisation and society. While much of the information which we have dealing with the eastern trade in Syria comes from Palmyra, it is clear that some commerce passed through northern Syria and along the Euphrates river as well, bypassing Palmyra altogether. These routes form the subject matter of the fifth chapter, which gives special attention to the matter of Roman relations with Parthia and the question of whether or not the eastern trade had any influence on these relations.
Having then examined the eastern trade in all the major areas, the study turns to an investigation of the imperial attitude toward the commerce, drawing on fresh evidence as well as that which has been covered in the regional studies. Attention is given to possible influences on the government attitude to the commerce, including on the one hand the Roman attitude toward *luxuria* and *mollitia*, two vices which the Romans saw as related to the use of luxury goods, and on the other hand the significant tax revenues which the government was able to extract from the commerce. Chapter Seven then forms a conclusion to the whole study, focusing on the nature of the trade, the effects of the trade on the imperial government and its policy in the east, and finally on the trade's significance to political formations in the communities of the Roman East.

The Appendices mostly provide greater information on topics noted in the text. Appendix A lists prices for various commodities in the trade as listed in Pliny the Elder's *Historia Naturalis*, and a brief comparison of these prices with the prices of staples and regular wages to give some idea of the relative expense of the items. Appendix B deals with the silver content of Nabataean coins, which is relevant to the question of whether or not the Nabataean kingdom experienced an economic slump in the first century A.D., and whether or not this was related to the trade passing through the kingdom. Charts of Roman currencies over the same period are provided for comparison. Appendix C deals with those inscriptions which mention an independent Palmyrene military organisation in the years prior to the Palmyrene rebellion against Rome in the third century, which is important for an understanding of the significant effects of the trade on Palmyrene society and politics. Finally,
Appendix D contains a study of the career of Septimius Odaenathus, the Palmyrene leader whose rise to prominence in the Roman East during the troubles of the mid to late third century have some relevance to Palmyra’s caravan commerce.

1.2 A Note on the Sources

The study of the long-distance trade of the Roman East cannot depend on only one or two historical sources, but must take into account a wide variety of literary, archaeological, epigraphic and other sources. Indeed, there is no one pre-eminent source to which we can turn in this study. Instead, we are forced to rely on more or less peripheral comments in works devoted to other subjects: only in two cases, the *Periplus Maris Erythraei* and the Palmyrene corpus of caravan inscriptions could we truly say that we have a primary source actually devoted to the subject we wish to study. Nonetheless, there is a wide variety of works which touch on the topic from time to time, or can be used to shed some light upon it, and by using these we can learn a great deal about the ancient eastern trade. Given the scattered and diverse nature of the evidence, however, any conclusions we draw must be treated with some caution. Despite this and despite the disparity of much of the evidence, there is still cause for some optimism that there is a sufficient volume and diversity of evidence to approach this study with reasonable expectation of success.
Literary Sources

As already mentioned, the *Periplus Maris Erythraei* is the only literary source which has the spice and silk trades as its primary subject. As a result, this merchant’s handbook for the Egyptian Red Sea trade is invaluable, providing not only copious information on the trade routes and ports of call in India, Africa and Arabia which Egyptian based ships used, but also lists of goods traded at each port. The very nature of this book also inspires confidence in the truth of its accounts: it is a workmanlike, practical manual for the merchant of the Red Sea trade, never intended as a work of literature, and thus we may reasonably expect the accounts it provides to be accurate. ⁶

This view of the *Periplus* is strengthened still further when an examination is made to see what can be learned about its author. Although the writer does not name himself, the *Periplus* is apparently the work of a merchant with considerable first-hand experience of the trade, as is shown at several points in the text. ⁷ By his references to Egyptian months and, at one point, his mention of “the trees we have in Egypt” ⁸ it is evident that he must have been a Greek-speaking resident of Egypt. ⁹ It is clear then that his work was intended as a guide for other merchants like himself who intended to be involved in the Red Sea trade; accordingly the information it provides can probably be relied upon to reflect at least the view of the trade that an Egyptian merchant would have held at the time. In the absence of strong evidence to the contrary, it would seem reasonable to accept the *Periplus*’ accounts and descriptions

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⁷ Ibid., 8. See e.g. *Periplus* 20 for explicit claims of first-hand experience of the route.
⁸ *Periplus* 29
at face value. Although its emphasis is on the Egyptian trade, it can also provide some interesting insights into the trade in Arabia and also further afield. As far as the trade in Egypt is concerned, however, the Periplus remains a source of the first rank.

There has, however, been a long-standing dispute over the date of composition of the work, which has some impact upon its reliability. Most scholars date the work to the middle of the first century, which of course would make it a primary source of great importance. Others, however, have contended that the work dates from the third century, and is consequently of lesser importance in any study of the Red Sea trade. However, the date would appear to be settled by a comment within the Periplus itself, which refers to a king at Petra named Malichus. As Nabataean chronology is now well established, we can now be sure that Malchus II reigned in Petra from A.D. 40-70, and therefore we can date the Periplus to the same period. Similarly, the Periplus’ reference to “Charibael, king of the Homerites and Sabaens” has been identified as a Hellenized reference to the king Karib’il Watar Yuhan’im I, king of Saba and dhu-Raydan, who reigned in the first century A.D. and probably before A.D. 70. Some, however, would still try to put forward a later date, although their arguments have been effectively refuted by Dihle. On the whole, it seems eminently reasonable to allot the Periplus to the middle of the first century A.D., and

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9 L. Casson The Periplus Maris Erythraei, 7-8.
10 For the various dates proposed see M.G. Raschke “New Studies in Roman Commerce with the East”, 979-980.
11 Periplus 19
13 Periplus 23
consequently to regard it as a first-hand source of pre-eminent importance for the study of the Egyptian Red Sea trade.

Other literary sources are more peripheral to the subject, but still often make useful references to the eastern long-distance trade. In this category the ancient geographers are of particular importance. Pliny and Strabo, and to a lesser extent others, record a great deal of useful information and frequently make direct reference to the eastern long-distance trade. Although their records are generally secondary and thus may well be somewhat distorted, this is not always the case. Strabo, for example, provides some first-hand accounts of Roman Egypt and a generally reliable account of the expedition of Aelius Gallus to Arabia Felix through his friendship with Gallus. Thus, Strabo at least is not without first-hand information, although in other cases his accounts for the most part remain heavily reliant on the work of others. Generally speaking, however, the geographers can provide useful information, although it is probably not wise to accept uncritically what they have to say unless it is confirmed by another source. Unfortunately, on many occasions we find that no such other source is available, and in the absence of any confirmatory evidence we have little choice but to accept the statements of Strabo or Pliny.

There are also some accounts of value in the works of ancient historians, most notably Diodorus Siculus and Josephus. While Diodorus deals with the period before this study, he nonetheless gives some information about the origins and early history of the Nabataean kingdom which helps in the understanding of the importance of the aromatics trade which passed through that realm. Likewise, the work of Flavius Josephus occasionally makes reference to a point of interest which can be helpful,
although as with Diodorus and the geographers the long-distance trade is not his primary concern and thus the information he provides is often peripheral. Nonetheless, all of these works can be very helpful when taken as a whole: often one source can be used to fill in a blank left by the others, and by this means a reasonable picture can emerge. Similarly, historians such as Appian and Cassius Dio occasionally provide snippets of information which can be utilised. Another source which can be of use, as will be seen, is the work of Latin poets, many of whom make useful references to the use of various goods of the eastern trade.

Beside these ancient literary works, there are some ancient itineraries and maps which can be of use. One which merits particular mention is the *Parthian Stations* of Isidore of Charax. Despite the fact that this work has been described as the record of the overland trade route through the Parthian kingdom from Antioch, along the Euphrates River, and thence over the Iranian plateau,¹⁶ nowhere in the text itself is this stated or even implied. This account does, however, provide a list of the σταθμοὶ along a route traversing the Parthian realm, though without specifying whether these were commercial caravanserais, military stations, or points along the royal mail route of the Achaemenid kings, all of which are possibilities. It consists basically of a list of place names along a route, with distances supplied between most of the stations (especially those along the Euphrates), and occasionally distances from the starting point (Zeugma on the Euphrates) or some other reference point. It is possible that this list is an abridgement of another, more comprehensive, work by the same author, as other classical writers refer to a *Παρθιακ Ἱπεργιάτις* by Isidore of

Charax. Although this work is brief, and it is unwarranted to call it an account of the trade route along the Euphrates, it nonetheless provides us with a useful record of the ‘natural’ route between Roman Syria and the East. Thus, even though we cannot say that Isidore’s work was written with commercial activities in mind, it is nonetheless safe to say that merchants would have made use of this route. The *Parthian Stations* is therefore an important literary source for this study.

Literary sources are an important but limited resource for the study of the long-distance eastern trade of the Roman Empire. While there are some very valuable first-hand accounts, most notable among which must be the *Periplus Maris Erythraei*, much of the literary material dealing with this topic is of a secondary nature. While such evidence can still be of great value, we should nonetheless for this reason approach it with some caution. Indeed, we might well say that if the literary record alone had to be relied upon to chart the eastern long-distance trade in the way proposed, such a study might well be impossible. Fortunately, however, this is not the case.

**Papyri & Ostraka**

In addition to the available literary evidence, papyri and ostraka have provided some important information. The bulk of the evidence in this category is, as one might expect, from Egypt. The preponderance of Egyptian evidence with regard to papyri and ostraka is of course a function of the peculiar climate and conditions of that country, which have resulted in the preservation of a great deal of perishable evidence.

17 Ibid.
which would have been destroyed in other countries. Thus, for the Egyptian trade especially, we have what is potentially a very valuable resource of contemporary documents.

Perhaps one of the most significant archives is the collection of ostraka from Coptos in the Nile valley which has come to be known as the "Archive of Nicanor", a collection of 64 ostraka which are the records of a family engaged in the caravan trade between Coptos and the Red Sea ports.\(^\text{18}\) Although this family does not appear to have been involved in the actual transport of eastern merchandise across the Eastern Desert, they were certainly involved in the supplying of the Red Sea ports and the imperial quarries in the region with foodstuffs and other essentials. Accordingly, this archive is of great importance in the study of the Red Sea trade, as it reveals information about the supplying and maintenance of these ports, as well as about the lines of traffic and about many of the participants in the eastern trade.

Other papyrus collections have also come to light in the recent excavations of various Red Sea ports (see below). One of the most significant of these is the collection of papyri and ostraka from the excavation of Quseir al-Qadim, published separately to the excavation reports.\(^\text{19}\) As with the Nicanor archive discussed above, these papyri do not tend to contain specific references to the Red Sea trade, but are concerned more generally with the everyday needs of the population at Quseir al-Qadim. In addition, this collection, along with several other papyri discovered in the region, provides an insight into the system used to garrison the military posts in the desert. Thus, though there is no specific reference to the eastern commerce, these

\(^{18}\) For a discussion of this archive see A. Fuks "Notes on the Archive of Nicanor" *Journal of Juristic Papyrology* 5 (1951), 207-216.
Papyri are very important to our understanding of the Red Sea trade and its organisation.

In addition to these major collections, many other papyri from Egypt are useful in the discussion of the Red Sea trade. Some of these come from other published collections, while others have been published in isolation. Some of these provide extremely important information about the trade, as in several cases they deal specifically with items of the commerce, the merchants involved, and several other important matters. Thus, in many cases these papyri serve as major pieces of evidence. With reference to the Egyptian Red Sea trade in particular, it would not be unreasonable to suggest that the evidence from papyri and ostraka is of great significance.

In other areas affected by the eastern trade, however, this is not the case. The volume of papyri preserved outside Egypt is of course far smaller, and so we simply do not have this resource available to us in such places as Syria and Arabia. Nevertheless, some peripheral information is supplied by collections of papyri which have been discovered in Judaea and at Dura Europos. While not directly dealing with the caravan trade or its participants, these nevertheless do provide useful information in some areas.

Thus, while outside Egypt the importance of papyrological evidence is somewhat limited, within Egypt its importance cannot be overestimated. In addition, the conclusions which can be reached concerning the trade in Egypt might in many cases be applicable to the commerce in other regions of the East. Though many

19 R.S. Bagnall "Papyri and Ostraka from Quseir al-Qadim" BASP 23 (1986), 1-60.
20 For these papyri see II. 2-3 below.
writers continue to emphasise the ‘uniqueness’ of Egypt, there are, in many cases, significant parallels with the situation elsewhere in the East. As will be seen through the course of this work, there are several occasions when conclusions reached in Egypt with respect to the eastern commerce can be legitimately applied to the other provinces involved in the trade. Thus, not only in Egypt, but elsewhere too, the papyrological evidence for the eastern long-distance trade of the Roman Empire assumes great significance.

Inscriptions

Inscriptions too have been found to be very useful in the study of the eastern long-distance trade. It is certainly true that the ‘epigraphic habit’ was well entrenched in the Roman East, as indeed it was in most other areas of the Roman Empire. The tendency to inscribe matters of importance to both cities and to individuals means that we might expect to find references to the eastern trade, especially in those places where the commerce was of some significance in the life of the city concerned.

Nowhere, of course, is this tendency better expressed (with respect to the eastern caravan commerce) than at Palmyra. The numerous commemorative inscriptions of this city are for the most part published in the eleven volumes of the *Inventaire des inscriptions de Palmyre*, while others are published in separate excavation reports or journal articles.21 These inscriptions are mostly in Greek and, uniquely in a city of the Roman East, Aramaic. A great many of them refer directly to

21 J. Cantineau, J. Starcky & M. Gawlikowski *Inventaire des inscriptions palmyreniens* I-XI (Beirut 1930-). For the other publications relevant to this thesis see Chapter IV below.
the caravan trade of Palmyra, usually commemorating the successful return of trading expeditions to the Arabian Gulf. In so doing, they provide a unique primary resource for this trade: indeed, with very few exceptions, it is the only evidence we have for the study of this particular aspect of the eastern commerce of Rome. Important details concerning the organisation of the caravans and the routes they took are revealed in the inscriptions, while other inscriptions in the corpus which do not directly mention the trade nonetheless reveal details of the way Palmyra tended to the needs of the trade in such areas as military protection. In addition, the very prominence afforded the 'caravan inscriptions', many of which are still in situ at important locations in the city, is itself an important testimony to the great significance of the caravan trade at Palmyra and the unique effects the trade appears to have had on the political life of that city.

By comparison with the richness of the Palmyrene archive, other collections of inscriptions pertinent to the eastern long-distance commerce must inevitably seem rather poor. Indeed, there is no other epigraphic archive which even begins to compare with the Palmyrene in dealing with the eastern long-distance trade. Nonetheless, other inscriptions are frequently able to contribute to our understanding of this commerce and its effects. There are, for example, several epitaphs and commemorative inscriptions erected by persons involved in the trade at one point or another which give some insight into the types of people that these merchants were. While not conveying much information about the trade as such, these inscriptions can reveal

22 See IV. 1 below. For a recent listing of the inscriptions relevant to the caravan trade, see M. Gawlikowski "Palmyra as a Trading Centre" Iraq 56 (1994), 32-33.
valuable information about the social standing of the dedicator, as well as other
information.

Particularly notable in this area are the inscriptions which have been found on
the roads between the Egyptian Red Sea ports and the Nile valley. While not
especially detailed, these inscriptions nonetheless provide some important
information about the periods during which various roads were used, and help in
provide more information about some individuals known from other sources, such as
some of the people mentioned in the Archive of Nicanor discussed earlier. In the Red
Sea area as elsewhere, especially Arabia, Roman military inscriptions can be of great
value in determining the position and purpose of various Roman military postings. As
will be seen throughout the course of this study, such military postings are frequently
associated with the caravan trade. Another important collection of inscriptions which
is often overlooked is the corpus of pre-Islamic Arabian inscriptions from the Syrian
and Jordanian deserts, often referred to as the Safaitic and Thamudic inscriptions.
While these do not deal directly with the caravan trade, they nevertheless provide an
insight into aspects of the political and social situation in Arabia during the Roman
period.

It is thus very clear that epigraphic evidence must be allotted a very important
place in the study of the long-distance eastern commerce of the Romans. Indeed, in
the case of the trade which passed through Palmyra, such a study would be
completely impossible if it were not for the evidence of the Palmyrene inscriptions.

23 A. Bemand Le Paneion d'El-Kanais: Les inscriptions greques (Leiden 1972); A. Bemand De
Koptos à Kossier (Leiden 1972); A. Bemand Les portes du désert: Recueil d'inscriptions grecques
24 See III. 5 below.
Although in other areas the epigraphic evidence might not possess the same relative importance, it nonetheless is able to provide illuminating evidence concerning many aspects of the trade, and the institutions of the Roman East which were significant to the trade.

Archaeology

The nature of the eastern long-distance trade means that in many cases there are few physical remains which can be studied in order to learn more about the commerce. Nonetheless, in several cases archaeological work has been of considerable use in this study, in the form of both field studies and intensive excavations. The increasingly important role of archaeological data in modern historical enquiry is amply illustrated by a study such as this, where a wide variety of sources must be employed in the absence of any authoritative work on the subject from the ancient world. As will be seen throughout the course of this study, data from archaeological explorations can be use to supplement written records when they are present, and often to provide information where no other evidence is present.

Field surveys have been useful in providing information in several areas of this study. One significant example is the case of the Roman military sites in the Arabian desert, which for the most part have not been excavated but have received attention from surface sherding, field surveying and other techniques. This has been most helpful in understanding the nature of the Roman military presence in this region, a factor which is itself related to the significance of the spice trade in the area. Similar surveys have been carried out on the roads between the Nile river and the Egyptian
Red Sea coast which carried the merchandise brought from India to the markets of the Empire, and the information gleaned from this work has been very useful in studying the amount of military investment the Romans were prepared to make in protecting the caravan traffic.\textsuperscript{25} Thus, surface surveys have been of great help in certain areas of the study, particularly those areas where the Roman army was involved in some way in the caravan traffic.

However, we need to sound a note of caution when dealing with the results of surface surveys. Often, the impressions gained by such surveys can be overturned when intensive investigations of the same area are carried out. In one example pertinent to this work, the date of some forts and roads in the Negev had to be revised after excavation, as the excavation showed the forts to have been occupied at times the initial surface survey had indicated they were abandoned. This, as will be seen, had significant ramifications for the study of the aromatics trade passing through Petra.\textsuperscript{26} Nonetheless, in the absence of any intensive excavation or other dating criteria in most other cases we would seem to have little choice but to accept the dates provided by the surveys, unless there is a compelling reason to reject them.

Excavation of various sites concerned with the spice trade has with few exceptions yielded little information except in recent years, most probably due to the limited remains such a trade would leave behind, coupled with the extensive amount of \textquote{background noise} in a large ancient site. Thus, even if there were physical remains of the long-distance eastern trade in major cities of the Roman East, it may very well be impossible to distinguish them from the artefacts of general trade and commerce in the

\textsuperscript{25} For these field notes and their application to this area of study see III. 2, 5 below.
city. Thus, excavations of such sites as Petra, Palmyra, Alexandria and others, though these places were heavily involved in the eastern trade, have yielded comparatively little information on it.

This problem, however, has been overcome to some extent in recent excavations of sites primarily involved with the Red Sea trade. Several sites on the Egyptian Red Sea coast, such as Abu Sha'ar, Quseir al-Qadim and Berenike have been excavated in recent years, and the information gained in these excavations has been very useful in the study of the Red Sea trade. In these sites, the problem of 'background noise' is far less severe, as the long-distance trade appears to have been the primary occupation of these communities. Thus, artefacts concerned with the trade are far more easily identifiable, and their lessons can be learned far more readily. Due to the recent date of these excavations, we are still forced to rely on preliminary reports as the final reports are still in preparation and in some cases cannot be expected for many years. Nonetheless, the excavation of these sites, together with some information which has been gained from other excavations in the area, add a great deal to our understanding of the eastern long-distance trade.

Thus it can be seen that archaeology has been a vital source of information in the investigation of the eastern long-distance trade of the Roman Empire. Both field
surveys and excavations have provided illuminating evidence for this study, and it is felt that this provides a good example of the potential role of archaeology in future historical undertakings. This is particularly the case in studies such as this one, where the available evidence is so widely scattered, and it is usually desirable to have some confirmation of a statement in an ancient source before we accept it. Archaeology can, in many cases, provide just such a confirmation. In addition, often archaeological information can stand on its own to provide information, although, as with all other sources, it is preferable to have another source to confirm and to contextualise the archaeological data. All things considered, however, archaeology has been of great help in conducting this study, and it would be clearly most unwise to omit it from the preparation of any similar work.

Conclusion

Some points are worthy of note in conclusion. One which will probably not have escaped the reader's notice is the preponderance of Egyptian evidence available. With the exception of the Palmyrene inscriptional corpus, the majority of the significant sources of information are found within Egypt, and it is thus possible that this may lead to an unwarranted bias toward the Egyptian trade in the study. While we must certainly remain alert to this possibility, there is really very little which can be done about it. From time to time it may be possible to apply conclusions reached from Egyptian evidence to other areas of the trade, and when this is possible it will be done. Nonetheless, for the most part we must simply accept that our study will be...
necessarily weighted toward those areas where a larger volume of evidence is available. We must, however, always remember that a preponderance of surviving evidence in one area does not necessarily translate to a greater significance of that area in the ancient world.

It is abundantly clear that the study of the eastern long-distance trade is dependent upon a wide variety of sources. What is equally clear, however, is the fact that no single source of information is sufficient to supply all the evidence for this study. Rather, it has been necessary to collate evidence from a number of sources in order to explore virtually any aspect of the eastern trade. However, much as though we might wish for more comprehensive information, it is felt that this wide evidential base is a strength rather than a weakness of this study. Rather than try to concentrate upon one source of information, simply using others to 'fill the gaps' where necessary, it is unapologetically proposed to adopt a holistic approach in this work, in which many sources of information are used in arriving at such conclusions as are possible. Indeed, this would seem to offer the historian wider avenues of opportunity for the investigation of his or her subject, although necessarily complicating the task somewhat. In the case of this study in particular, such an approach is the only one which promises a profitable result, given the scattered and varied nature of the sources. It is felt that this methodology will allow positive and significant results from what at the first sight might seem to be a confusing and limited pool of available evidence.

Eastern Desert (Leiden 1996).
I.3 Models of Trade in the Roman Economy

While it is clear, as will be seen, that there was a demand for the goods of the eastern long-distance trade at Rome, the exact financial significance of this trade in the Roman economy is difficult to gauge. An area of considerable debate has been the relative importance of trade in general in terms of Roman economic life, and obviously any consideration of the long-distance trade of the Roman East must take this into account. However, when considering this we must also bear in mind the unusual nature of the trade in eastern 'luxuries': the high value of the goods may well make them an exception to any general principle concerning the place of trade in the Roman economy. With this in mind, then, it is now proposed to examine briefly the models of the Roman economy which have been put forward, with particular reference to the place the eastern long-distance trade might have occupied in each of them.

Models of the Roman Economy

Probably the dominant model of the Roman economy in current historical research is that derived from the works of M.I. Finley and A.H.M. Jones. These scholars, and those who follow them, contend that the Roman economy was primarily agricultural, with very limited commercial and trading activity.28 This view arose as a reaction to the views of prewar historians such as Rostovtzeff who imagined a far more 'modern' picture for the Roman economy in which trade and commercial

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activity were much more significant. Indeed, in the case of the cities of the East which were involved in the trade in luxury goods, Rostovtzeff took the view that such places could have been more or less entirely supported by the caravan trade: they could have been, to use Rostovtzeff's own phrase, 'Caravan Cities'. From such views, then, Jones and Finley have retreated, emphasising the essential inapplicability of modern terms such as 'market' to an economy which was in fact radically different from our own.

Generally speaking, the historians of the Finley/Jones school have demonstrated that the view of the Roman economy as primarily agricultural is correct, and in this they have received some support from archaeological research. It would certainly seem appropriate, given the current state of research, to reject a 'modernistic' approach to the Roman economy and to recognise that, while trade could be of special significance in certain areas, it was still generally conducted on a fairly limited scale and its practitioners were held in low social esteem.

An important modification of this view, however, has been proposed by Keith Hopkins. Hopkins, while agreeing that the economy of the Empire was chiefly agricultural, argued that the Roman demand for monetary taxes, and their redistribution of these taxes (especially to frontier provinces) would result in a stimulation of trade as tax-exporting areas attempted to raise money for taxes by

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30 M.I. Rostovtzeff Caravan Cities (Oxford 1932), passim.
31 M.I. Finley The Ancient Economy, 19-27.
32 See e.g. K. Greene The Archaeology of the Roman Economy (Berkeley 1986).
33 M.I. Finley The Ancient Economy, 59.
selling surplus production. Thus, while still allowing for the primacy of agriculture, Hopkins envisages a more significant role for trade in the ancient economy, particularly in the time up to c. A.D. 200 when the monetary economy was strong and the coinage, generally speaking, continued to hold its value. After the rapid debasement of the coinage following the Severan period, however, Hopkins argued that taxes began to be levied in kind, and as a result trade broke down. In this way, while not departing from the essential primacy of agriculture as established by Finley and Jones, Hopkins envisages a more significant role for trade which, accordingly, might have some importance in a study of the eastern long-distance trade.

The Relevance of Economic Models to the Eastern Long-Distance Trade

Thus, the adoption of one or other of these economic models might seem to have considerable relevance to our view of the trade in eastern 'luxury' goods which is the object of this study. Indeed it might at first appear that only the adoption of the prewar 'modernist' viewpoint would allow the eastern long-distance trade any significance at all. Yet as we will see, the trade undoubtedly existed and may indeed have possessed considerable significance; certainly it attracted the attention of several ancient writers. Does this then mean that a study of the eastern long-distance trade has implications for the current orthodoxy with regard to the Roman economy? The answer, in fact, is that it probably does not. The eastern long-distance trade is in many respects exceptional due to the extremely high value of the goods traded, as will

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35 Ibid., 107-114.
be discussed in the later section on the demand for the goods at Rome. The very high return on these items would have made it possible for a merchant to make considerable profit even when conditions were such that commerce over shorter distances in staple goods would have been difficult and probably pointless in terms of potential earnings. This is illustrated by a statement of Pliny which claims the value of the goods sold in Rome was one hundred times greater than the cost the merchant paid for them in their port of origin. While the figure is no doubt a very rough approximation, it nonetheless gives a good idea of the levels of profit which could be made on these types of goods.

It is certainly clear from this that the trade in eastern goods could be an exception to general rules about trade in the Roman economy due to the very high profits which were obtainable. Thus, the general rule that cities in the ancient world were primarily centres of consumption, fed by the countryside around them, might not apply to places involved in the eastern long-distance trade. Indeed, Finley himself recognised that such places as Palmyra, heavily involved in the eastern commerce, could depend to a far greater extent upon their trade than was generally the case, and the 'normal' social and political position of trade and traders within the Roman Empire could be significantly modified in such places. Thus, even in an economic model which emphasises the primacy of agriculture and minimises that of trade, we are justified in seeing the eastern 'luxury' trade as an exception, with the economic pattern of the Empire having little bearing on the conduct of the trade. Conversely, the

36 Ibid., 114-123.
37 Pliny NH VI. 26
38 M.I. Finley The Ancient Economy, 59.
study of the eastern trade might be seen as having little impact on the study of the Roman economy as a whole.

Even Hopkins' model, with the importance it attaches to trade stimulated by the Roman demand for taxes, might not be as significant as it initially appears. Hopkins took the view that inhabitants of those provinces he called 'tax-exporting' - that is, relatively wealthy provinces with little military garrisoning, such as Asia - would have sold off their surplus agricultural production in order to raise money to pay taxes. This may indeed have been the case, although Hopkins' conclusions have been challenged. However, the question of whether or not Hopkins' theory is correct is not especially relevant to this study, as the eastern long-distance trade does not conform to this pattern: as will be seen, if any flow of money was discernible at all due to the long-distance trade it was going out of the empire, not toward the provinces that needed to pay taxes. Certainly, this was the way the Romans saw the situation, as is shown by several references in the primary sources which will be examined later in this study. Considerable wealth was undoubtedly generated for the merchants engaged in this trade also, and they may very well have used it to pay their taxes. The fact remains, however, that the eastern trade did not cause any discernible flow of money to Hopkins' 'tax-exporting' provinces, and it is thus substantially irrelevant to the study of this aspect of the Roman economy. Thus, once again we see that the eastern trade could have existed regardless of which model of the Roman economy is preferred: its unique nature means we must see it as an exception to almost any economic system we try to envisage for the Roman world.

Conclusion

Therefore, the model of the Roman economy that is adopted need not necessarily influence our view of the eastern luxury trade: even in the most agriculturally-based views of the economy, trade in items of high value but relatively small size and weight can be regarded as possible, due to the high profit margins attainable. The exceptional nature of this commerce means that it would have operated at least to some extent regardless of the nature of the rest of the economy, and likewise it limits the usefulness of a study of the commerce as evidence in drawing conclusions about the Roman economy as a whole. Petra, Palmyra, or other cities like them, could then indeed have been ‘caravan cities’ at least to some extent; significant and unusual exceptions to the general dependence upon agriculture which was the characteristic of the bulk of the Roman economy.\(^4^2\) To what extent in fact they were, and what effects the commerce in eastern luxury goods had upon the Roman East and the Roman world in general, will be one of the subjects of this study.

I.4 The Commerce in Eastern Goods within the Roman Empire

It is not proposed in the course of this study to undertake a systematic survey of the origins of the various items of the eastern trade, as the respective provenances of the goods presumably had little consequence upon the political significance of the commerce. Nor indeed is it intended to attempt to catalogue all the items of the trade,

\(^{41}\) See VI. I below.

as again the actual variety of goods imported would not significantly have affected the political aspects of the eastern commerce. Such surveys do exist, and they have shown that the majority at least of the items of the eastern trade can be identified with reasonable accuracy.\textsuperscript{43} As far as this study is concerned, however, the items of the trade are only of significance when first received by Roman traders, and these points will be explored in the chapters relating to the trade in various areas of the Empire.

The trade in silks, spices and other such goods of the eastern commerce could never of course have arisen if there had been no demand for such goods in the Roman Empire. Frequently this commerce is described as a trade in luxuries, arising out of a 'decadent' taste for such things, especially at the height of Roman power and wealth under the Empire.\textsuperscript{44} However, we should be careful about applying such terms as 'luxury goods' indiscriminately to these items, or assigning the demand for them wholly to a Roman taste for \textit{luxuria}. In an examination of the references to these goods as they were used in Rome, it will soon be found that there is no readily available category to which we might assign them. Some goods were indeed luxury goods, but on many occasions these commodities and others had medicinal or religious applications. Therefore, as will be seen, it is incorrect to call Rome's long-distance trade with the East a 'luxury' trade, as items of a religious nature for example would certainly not have been regarded as luxury items by the Romans, expensive though they might be. Rather, we should examine the different ways in which the various

\textsuperscript{43} For the most detailed work of this type, attempting to identify all items of the ancient trade and provide a modern equivalent see J.I. Miller \textit{Spice Trade}, 30-118, although one must be cautious about Miller's conclusions. See also S.E. Sidebotham \textit{Roman Economic Policy in the Erythra Thalassa}, 14-24 for a survey of the items of the Indian and Arabian trades, and L. Casson \textit{The Periplus Maris Erythraei}, 39-43 for a survey of the goods of the Arabian, Indian and African trades as revealed in the \textit{Periplus Maris Erythraei}. 

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goods were used at Rome, and try to determine what conclusions can be drawn from this information regarding the market for such merchandise.

**Genuine Luxury Goods**

There were, nonetheless, several items which the eastern trade brought to Rome solely to appeal to the Roman taste for luxury goods. Although we must be careful about the moralising stance taken by many Roman writers, it is still not unfair to suggest that the upper echelons of Roman society had a pronounced taste for various luxury items. *Luxuria* was a vice against which writers from the Republican period on had railed, with apparently little effect. There seems to have been a steady market for luxury goods from relatively early in the Republican period, and it is during this period that the first literary complaints about eastern luxuries and corrupt "luxurious" living are found. Despite the lack of easy communication with this region during the Republican period, many of these goods came from the East. However, judging by the literary references there appears to have been a dramatic increase in the availability of eastern goods early in the Augustan period, no doubt due to the recent Roman subjugation of the Eastern Mediterranean and the newly established peace which allowed the merchants free access to the markets of Rome.

Indeed, poets and writers from the Augustan age onward make frequent reference to the use of such things as silks, spices and pearls brought from the lands to the East of the Empire. These references show that such goods were well known and

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Some of the goods, for example, consisted of items for the production of clothing and adornment. In this category are found silks, decorated cotton, pearls and various gemstones, as well as other decorative materials such as shells, tortoiseshell, coral and ivory. Other items which can be identified from the ancient writers were used chiefly as perfumes and unguents, including nard and aloe. A further category which can be identified under the general heading of 'luxury goods' is that of culinary items, such as pepper, cinnamon, cassia and others, most of which could also be used in the manufacture of perfumes, ointments and unguents. Also a part of the commerce, although presumably in far smaller quantities, were such exotic items as tigers and ostriches. Each of these items had to be brought from various sites in the East, at great expense (as will be seen later in this section), and this in itself suggests a significant demand for such goods at Rome.

Thus, we can see that there was indeed a wide variety of goods which were used for purposes we might characterise as 'luxury'; both those used for personal decoration or adornment and those used as condiments for food and drink. When some of the references to the use of these items are examined, it becomes clear that there was both a significant demand for these luxury items, as well as a considerable familiarity with them at Rome during the period under discussion. In one Augustan reference, Propertius mentions the taste for luxury that had become so noticeable in his day, showing the familiarity with many luxury goods which existed in Augustan society:

45 See e.g. the complaints of Scipio Aemilianus about the 'degeneracy' of the youth in his day who were being affected by Greek and Asiatic customs (Scipio fr. 17-26, 30 ORF).
Quaeritis, unde audis nox sit pretiosa puellis,
et Venere exhaustae damna querantur opes?
certa quidem tantis causa et manifesta ruinis:  
luxuriae nimium libera facta via est.
Inda cauis aurum mittit formica metallis,  
et uenit e Rubro concha Erycina salo,  
et Tyros ostrinos praebet Cadmea colores,  
cinnamon et multi pastor odoris Arabs:  
haec etiam clausas expugnant arma pudicas,  
quaeque gerunt fastus, Icarioti, tuos.

You ask why a night of love is made dear by women’s greed,  
and exhausted wealth complains of losses to Venus?  
Certain indeed and clear is the cause of such ruin:  
the path of luxury is made too free.  
The Indian ant sends gold from the hollow mines,  
and Venus’ shells come from the Red Sea,  
Cadmean Tyre supplies purple dyes,  
and the Arab shepherd of many perfumes, cinnamon.  
These weapons storm even close-guarded, virtuous women,  
and those who have your disdain, daughter of Icarius.  

From this excerpt it is clear that Propertius was aware of the prevalence of luxury goods in society in his own time. He professes to be concerned about this tendency, and (in this poem at least) adopts a moralistic tone to decry the contemporary taste for luxuries, comparing it with the alleged simplicity of earlier Roman society. In concluding the poem, he exclaims:

proloquar: -atque utinam patriae sim uerus haruspex!-  
frangitur ipsa suis Roma superba bonis.

I will speak out: -and may I be a true prophet to my country!-  
Great Rome herself is broken by her own riches.  

Whatever one thinks of Propertius’ moralising, it seems apparent that the use of goods such as those mentioned in the poem had become quite prevalent in Roman society, at least in the circles in which Propertius and his contemporaries moved.

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46 Propertius III. 13. 1-15  
47 Propertius III. 13. 59-60
Moreover, Propertius links this prevalence directly with the great prosperity of Augustan Rome, giving an indication that the increase in wealth and prosperity at that time had brought about a considerable increase in the market for and demand for eastern luxury goods. It is also clear that there existed among Propertius’ readership a reasonable degree of familiarity with them and a knowledge of their use.

Of course, there is significant debate as to the ‘reality’ of the world described by the Latin erotic poets;\textsuperscript{48} by itself, this poetry could not be taken to indicate a significant demand for luxury goods at Rome. However, the very fact that these items can be named with reasonable expectation that the reader will understand the reference, these poems certainly \textit{do} show a certain degree of familiarity with the goods among the readership of the works. We can thus legitimately conclude that among the upper-class Romans likely to be reading Propertius, Ovid or the like there would be a good knowledge of these luxury items and their uses, and also, very probably, a significant demand for the same goods.

Indeed, this familiarity, as well as the association of \textit{luxuria} with many of the goods, is confirmed by other sources. These sources might be thought of as more sober than the elegists, although frequently they are also rather more moralistic. Nonetheless, they too reflect a significant demand for luxury goods, including those of the eastern trade, at Rome in the imperial period. In one famous passage, Tacitus reports a letter from Tiberius to the Senate in which the Emperor had complained about the taste for luxury goods and a lifestyle of \textit{luxuria} which (he claimed) was

\textsuperscript{48} For this debate see e.g. J. Griffin \textit{Latin Poets and Roman Life} (London 1985); D.F. Kennedy \textit{The Arts of Love} (Cambridge 1993), 1-23.
especially notable in his day. In the course of his remarks, Tiberius mentioned the
trade in jewels with foreign lands:

..illa feminarum propria, quis lapidum causa pecuniae nostrae ad externas aut
hostilis gentis transferuntur?

.. that particular (luxury) of women, for which for the sake of jewels our
wealth is transferred to foreign or hostile countries?\[49\]

Pliny too grumbled about the wealth which was being transferred to India and to the
east generally,\[50\] again demonstrating the familiarity with the trade and the goods it
brought which existed in Rome at the time. Whether or not these complaints represent
real concern over the wealth being transferred to foreign lands, or just conventional
moralising, will be discussed later:\[51\] for now, it will suffice to note that they show the
eastern trade had established a noticeable presence in Roman society under the
Principate.

The particular grievance that Tiberius and Pliny professed to have against the
luxury trade was, of course, the amount of money which was being spent on the
goods. Indeed, an examination of the prices which were paid for these items shows
that they were certainly quite expensive. Although prices are very difficult to
determine in many cases, and no doubt varied from time to time, we can nevertheless
gain a general knowledge of the kind of prices paid for these goods. Pliny gives some
prices which were presumably those current at Rome in his time: for example, he
quotes prices of between 4 - 15 denarii per pound for various types of pepper\[52\].

\[49\] Tacitus Annales III. 53
\[50\] Pliny NH VI. 26; XII. 41
\[51\] See VI. 1 below.
\[52\] Pliny NH XII. 28
75 denarii per pound for nard leaves\textsuperscript{53}, and 300 denarii per pound for a trader's grade of cinnamon.\textsuperscript{54}

It is thus quite clear from these figures that the luxury goods traded at Rome could be quite expensive, and were presumably only regularly consumed by the richer members of society. Such prices were not, however, prohibitive: they would have been low enough to allow most of the wealthier classes of Romans to use these goods. Indeed, given the fact that most people would have used only small portions of such valuable spices, even those of lower economic status may have made use of them occasionally. Expensive though they were, they were not so expensive as to make them the exclusive preserve of the very rich: probably a reasonable cross-section of Roman society would have been able to purchase at least some of these goods,\textsuperscript{55} which would account for the familiarity with the goods as shown in the literary citations above. These prices are also indicative that a significant demand for the goods existed, otherwise such prices could not have been asked. Whatever the opinion that the government might have had of the use of these items, we are justified in concluding that there was a strong demand for luxury items among Roman society.

While by themselves the moralising comments of Tacitus or the references of the elegists could not be taken as conclusive, taken together they demonstrate the existence of a solid market for luxury goods at Rome. Of course, the market for such goods would not only be found in the capital of the Empire, and no doubt the demand that existed at Rome for the goods of the eastern trade was also found, albeit to a

\textsuperscript{53} Pliny \textit{NH} XII. 44
\textsuperscript{54} Pliny \textit{NH} XII. 43. See Pliny \textit{NH} XII passim for further references, summarised in Appendix A & J.I. Miller \textit{Spice Trade}, 26-28.
\textsuperscript{55} See Appendix A below.
lesser extent, throughout the upper echelons of provincial society as well. Taken
together, the market that existed at Rome and throughout the Empire must have
represented a considerable demand for the luxury merchandise of the eastern trade.

Goods of a Religious Nature

Although the Arabian aromatics such as frankincense and myrrh are often
taken with the goods described in the previous section as ‘luxury goods’, one should
in fact be careful to make a distinction in the case of these incenses. While there is no
doubt that they were expensive, as will be seen, the importance of incense in religious
observance means that we must consider the Arabian aromatics a category entirely
separate to the luxury items described in the previous section. A wide range of Roman
and other literary references show clearly that frankincense and myrrh were
predominantly considered to be items of religious significance rather than luxury
goods.56 These incenses had been burned in honour of the gods at temples and at
funerals for centuries, both in Roman religious practice as well as in Hellenistic and
Near Eastern cults.57 Thus, the market for these goods was well-established in the
Roman world, and was deeply rooted in the religious practices of the Greeks and
Romans. Indeed, as the famous reference to the use of frankincense and myrrh in the
New Testament shows, these incenses were associated with divine honours in other
cultures beside the Greeks and Romans.58

56 S.E. Sidebotham Roman Economic Policy in the Erythra Thalassa, 15. See this ref. also for a list of
the references in Roman literature to the use of myrrh and frankincense.
57 For a detailed study of the uses of these incenses and the ancient trade involving them see N. Groom
58 Matthew 2: 11
Thus, the commodities of frankincense and myrrh enjoyed a strong and well-established market in the Roman Empire, assured by the prevailing religious practices of the day. It is therefore clear that the trade in Arabian incenses such as these should not be considered a ‘luxury’ trade in the sense of the goods examined in the previous discussion: incenses required by religious and funerary practices, however expensive, could only have been viewed as necessities by those Romans who were able to afford them. Despite this, the use of incense at funerals was not immune to excess: thus, the commerce in Arabian incense can be thought to have been enhanced by society’s tendency to *luxuria* in the imperial period. Pliny describes this excess in the use of funerary incenses, implying that much more of the incense was in fact used in funerals than was used in other religious rituals, and that the volume of incense so used had more to do with extravagance than it did with religious necessity:

beatam illam fecit hominum etiam in morte luxuria quae dis intelleixerant genita inurentium defunctis. periti rerum adseuerant non ferre tantum annuo fetu quantum Nero princeps nouissimo Poppaeae suae die concremauerit. aestimentur postea toto orbe singulis annis tot funera, aceruatimque congesta honori cadauerum quae dis per singulas micas dantur!

The luxury of men even in death makes it (sc. Arabia) fortunate, in burning to the dead the things which they understood were made for the gods. Good authorities state that Arabia does not produce as much in a year as the Emperor Nero burnt for his consort Poppaea in a day. After that, let the number of funerals throughout the whole world in one year be reckoned, and that which is piled up in heaps to the honour of corpses, but given to the gods in single grains!59

The trade in Arabian incenses cannot therefore be entirely divorced from the luxury trade, as Pliny in the above quote specifically cites the tendency to use excessive amounts of incense at funerals as a case of *luxuria*. Despite this, however, the goods

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59 Pliny *NH* XII. 41
which were so used, regardless of the extravagance with which they were applied, were still likely to have been considered an altogether different category of goods than the luxury items dealt with previously. Pliny only decries the extravagance with which the incenses were burned, not the actual validity of the practice of burning them to the gods or (presumably in lesser quantities) at funerals.

It is clear from Pliny's words that he considered the market for Arabian incenses to have been a sizable one. Indeed, this is reflected in the prices which Pliny records for frankincense and myrrh. Frankincense was sold at between 3 and 6 denarii per pound, depending on the grade, while myrrh fetched between 12 and 16.5. Thus, while these prices were not as expensive as many of the luxury commodities outlined previously, they were still reasonably high. Especially when the large quantities implied by Pliny are taken into account, the market at Rome for Arabian incenses such as frankincense and myrrh must have been a lucrative and sizable one.

Goods used for Medicinal Purposes

As well as luxury goods and goods which were used for religious purposes, abundant literary evidence points to the use of items of the eastern trade in the manufacture of medicines. One of the most comprehensive of the ancient treatises which deal with the medicinal uses of various items of the eastern trade was the De Materia Medicina of Dioscorides, which dates from approximately A.D. 65. In the course of this work, Dioscorides describes the use of several Arabian and Indian

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60 For these and other prices recorded in Pliny see Appendix A.
61 For lists of these references and the various medicinal uses to which the goods were put see J.I. Miller Spice Trade, 4-8; M.G. Raschke "New Studies in Roman Commerce with the East", 1013.
spices, either on their own or as an ingredient in a compound medicine, for the
treatment of assorted ailments. Some of these included myrrh and oil of myrrh,
cinnamon and cassia, nard, malabathron and several others, all of which were
commodities of the eastern trade.

These goods were especially prized for their perceived properties as antidotes
to poison, which made them useful for cleansing wounds, defeating infections and as a
preventative against poisoning. Indeed, eastern spices were major ingredients in
Crateuas' famous antidote which he administered to King Mithridates of Pontus to
prevent poisoning, and which was said to have been so effective that when
Mithridates actually wanted to poison himself to prevent capture he was unable to do
so. Similarly, Theophrastus noted the power of pepper as an antidote. While it is
not the place of this work to comment on whether or not these remedies actually are
medically effective, it is quite clear that they were regarded as being so in the Roman
world. Thus, it seems that the medicinal properties of these goods would have made
some contribution to the demand for goods of the eastern trade in the Roman and
Hellenistic worlds. While it is impossible to tell what proportion of these goods might
have been used for medicinal rather than 'luxury' purposes, the existence of a
medicinal demand over and above the demand for these goods purely as luxuries must
affect the common view of the trade as a 'luxury' commerce. It is clear from this and
from the goods of religious and funerary significance that at least some of the items
which were imported into the Roman Empire as a part of the eastern commerce were

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62 Dioscorides De Materia Medicina I. 1-27, 52-76
63 J.I. Miller Spice Trade, 4-8.
64 Celsus De Medicina V. 23. 3
65 Theophrastus HP IX. 20. 1

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regarded, if not as necessities, then certainly as something much more significant than mere luxury items.

Also worthy of note is the fact that the items which were used for medicinal purposes were not necessarily specifically imported for that purpose: that is, the items used in the manufacture of medicines were the same as those used for religious purposes or used in the manufacture of perfumes and other luxury items. It is thus, as has already been noted, not possible to divide the goods sharply between their categories of use: myrrh, for example, was used as an ingredient in perfume, an incense burnt at funerals and in honour of the gods, and as an ingredient in medicines. When dealing with Rome’s ‘international’ trade with the east, then, it is important to bear in mind that the goods which were imported were not all what we would call ‘luxury items’. Some of them were used primarily in religious and funerary applications, while others were used as medicines. Moreover, these items used for medicinal and religious purposes were often the same goods as could be used as luxuries, and these applications contributed significantly to the demand for these items at Rome.

Thus, the term ‘luxury trade’ is not a useful one when dealing with Rome’s long-distance eastern commerce. The items could be put to many purposes, but they had in common the fact that they were easily transportable and the object of a considerable demand, which made it worthwhile to ship them such vast distances. Without such a demand, the trade as we know it from Roman times would never have been possible. Moreover, the relatively high prices recorded by Pliny for some of these items show clearly that even in the Flavian period, after the trade had been strongly established for many decades, the demand and market for such goods was
still very strong. This demand indicates that, regardless of the route taken by a trader or the amount of tax he had to pay, he could be assured of a good price for his wares in Rome.

The Trade in Eastern Goods within the Roman Empire

Thus, it is quite apparent that a strong demand existed within the Roman world for the imported merchandise of the eastern trade, whether for luxury, religious or medicinal purposes. While in the remainder of this work it is proposed to study the conduct and effects of the trade in various specific areas of the Roman East, it will be useful at this point to examine briefly the trade in commodities of eastern provenance within the Empire itself. The evidence seems to indicate that there was a large group of merchants engaged in the purchase of goods coming into the eastern part of the Empire and in the subsequent reprocessing of the goods and eventual sale to the consumer.

Many of the imports into the Roman East consisted of raw, unfinished items. Generally the goods were not sold to the consumer in this form, however. There is evidence of an important reprocessing industry which the bulk of the imported goods passed through before their final sale. There are, for example, references to the reprocessing of various goods in Alexandria which will be discussed in the following chapter. In addition, there is evidence of a reprocessing industry in Roman Italy itself, especially in Campania. In Capua, for example, there was an area called Selapsia which was frequented by the unguentarii who bought, sold and manufactured
The ingredients of these perfumes:66 many of the ingredients of these perfumes no doubt came from the eastern trade. This kind of reprocessing seems to have added a considerable amount to the value of the items imported in the eastern commerce. This is demonstrated by the vast difference in price between raw silk and reprocessed silk in Diocletian's price edict: although the document is late, the difference in price is not likely to be markedly different in the earlier period.67 It would thus seem that most of the goods which were finally purchased for consumption in Rome or in other markets throughout the Empire had undergone some form of reprocessing since their arrival in the East. This is very important to bear in mind, as it implies that the bulk of money which was spent on the goods may very well have gone not to foreign traders or "middlemen", but rather to those who traded in and reprocessed the goods within the Empire itself. This comes to be of great significance when the attitude of the imperial government to the eastern commerce is studied, and will accordingly be given prominence in the appropriate portion of this work.68

Once they had undergone this processing, these goods were then conveyed to the final point of sale, which could have been anywhere throughout the whole Empire. However, a great quantity of goods would no doubt have been conveyed immediately to the place where the greatest demand existed, which in the early centuries at least would undoubtedly have been Rome itself. Luxury goods were a major item of merchandise in late republican and imperial Rome, as we have already seen earlier in this section. These goods were especially a feature of the markets of the Sacra Via in

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66 Cicero *In Pisonem* 24-25. For *unguentarii* at Capua see *CIL* 1. 1594; X. 3968, 3974, 3979, 3982.
67 *Edictum de Pretiis Maximis* XXIII. 1-2 (undyed white silk, 12,000 d.c./pound); XXIV. 1-1a (dyed purple and fine-spun, 150,000 d.c./pound).
68 See VI. 1 below.
the late republican and early imperial periods, as several primary references attest. Although of course not all luxury goods were of eastern provenance, many of the goods sold in these stalls probably came from the East. Indeed, Dio records that the horrea piperataria (pepper warehouse) built by Domitian on the current site of the Basilica of Maxentius and Constantine was a "storehouse of Egyptian and Arabian wares", suggesting that this building at least was used extensively for the sale of eastern luxuries alongside those of local provenance. It may well be, considering the long association of the Sacra Via area with the sale of luxuries, that Domitian's construction merely restored the earlier function of a market for eastern luxuries to this area after it had been appropriated by Nero for the approach to his Domus Aurea. In any case, the apparent presence of a substantial permanent structure largely devoted to the sale of eastern goods at Rome would again indicate a considerable demand and market for eastern goods at Rome, and probably also throughout the Empire.

The Volume of the Trade

With such a proliferation of people involved in the commerce, and with such evidence as we have for a strong demand for the goods of the long-distance eastern trade, it would appear that the trade was a sizable and profitable venture. Indeed, given the vast amount of capital that would be required to undertake a journey to the East, participation in the eastern commerce must have been very profitable, in order

70 Ovid Ars Amatoria II. 265-266; Amores I. 8. 100; Propertius II. 24. 13-14
71 Dio LXXXIII. 24. 1-2
to justify the risk and expense involved. Nevertheless, despite the general
impressions which we can gain from the ancient sources concerning the relative
prominence and significance of the trade, any attempt to divine precise statistics for
the trade seems difficult if not impossible.

Pliny does in fact give some figures for the volume of the trade, but, as will be
seen, these figures cannot be taken as reliable. In one instance, Pliny states that the
amount of money being sent out to India to pay for goods imported from that country
was 50 million *sestertii* per year; in another location, he tells us that 100 million
*sestertii* were expended upon all imports from India, China and Arabia.

On several occasions scholars have used Pliny’s figures as a basis for
calculating the exact volume of the trade. In reality, however, these figures are
essentially useless in this regard, for they do not specify whether this was the actual
amount of money which found its way to India or if it was the total retail cost of the
items in Rome: no doubt two very different amounts, as we have seen. In all
probability the figures given by Pliny are very vague estimates, owing more to Stoic
moralising on the cost of luxury than to imperial customs receipts or various other
sources which have been suggested. It would be extremely rash even to attempt to
use these figures to calculate the volume of the commerce: the most they could do is

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72 L. Richardson *Topographical Dictionary*, 194-195.
73 For some details of the financial arrangements involved in the Egyptian Red Sea trade see II. 3
below.
74 India: Pliny *NH* VI. 26; India, Arabia and China: Pliny *NH* XII. 41.
75 F. Hirth *China and the Roman Orient* (Shanghai 1885), 227-228; E.H. Warmington *Commerce,
274-278; A.C. Johnson “Roman Egypt” in T. Frank (ed.) *Economic Survey of Ancient Rome II*
(Baltimore 1936), 345; T. Frank “Rome and Italy of the Empire” in T. Frank (ed.) *Economic Survey
of Ancient Rome V* (Baltimore 1939), 283; S.J. de Laet *Portorium* (Brugge 1949), 304; J.I. Miller
*Spice Trade*, 222-225.
76 See also VI. 1 & 2 below. On the probable inaccuracy of Pliny’s figures see M.I. Finley *The Ancient
Economy*, 132, 206; M.G. Raschke “New Studies in Roman Commerce with the East”, 634-637;
to give us some insight into the scale of the commerce. In this regard, however, they
give us little more insight than does a statement of Strabo, who relates that during the
prefecture of Aelius Gallus, at which time Strabo himself travelled in Egypt, 120
ships a year sailed to India from the Egyptian ports of Myos Hormos and Berenike.78

Nonetheless, even though the figures given by Pliny do not in fact possess the
precision which they seem to imply, they still give us a reasonable idea of the scale of
the commerce, especially when taken in conjunction with Strabo’s description of the
volume of traffic in his day. Even though we cannot know absolute quantities, it is
apparent that the eastern long-distance trade of the Roman Empire was conducted on
a considerable scale, and supplied a sizable demand for its goods among the upper
classes of Roman society.

Conclusion

Thus, there is strong evidence for the existence within the Roman Empire of an
important market for goods of eastern provenance, as well as a sizable community of
merchants within the Empire, who depended upon the trade in such goods and were
active in the reprocessing, transportation and sale of these goods to the public. The
prices which were asked for the goods of the eastern trade indicate that the trade was
a healthy one and likely to be extremely lucrative for anyone who became involved in
it. In addition, the prevalence of literary mentions of the goods indicates that the items
of the eastern trade were relatively well-known among the upper echelons of Roman

77 K. Harl Coinage in the Roman Economy (Baltimore 1996), 303.
78 Strabo Geog. II. 5. 12
society: clearly we are dealing not with isolated instances, but with a trade which, by ancient standards at least, appears to have acquired some size and significance.

The existence of a market for the products of the eastern trade is therefore well established. However, before the goods reached the consumers, and even before they were reprocessed in the factories of Alexandria or of Italy, they had to be conveyed from their points of origin over long and difficult trade routes. Although the routes shifted somewhat throughout the period under study, the pattern which they followed at the time of Augustus' accession was still the basis of the routes throughout this time.

1.5 The Situation at Augustus' Accession

While it is true that the trade in aromatics, spices and other such goods was particularly prominent during the Roman period, it nonetheless had existed long before the Romans came on the scene. Many ancient societies of the East participated in the trade, and commodities such as frankincense, myrrh and cinnamon were known and valued many centuries before Roman traders became acquainted with them. Thus, when the Romans finally took complete control of the Eastern Mediterranean region after 31 B.C. with the surrender of Ptolemaic Egypt, they acquired territories in which the long-distance trade with the East was already well established. It will thus be pertinent to examine the situation regarding the spice and silk trade as it was at the time the Romans took over full control of the Mediterranean basin.
The Routes of the South

For the greater part of the first century B.C., long-distance trade into what became the Roman East was largely confined to the southern region, as the political situation in the north prevented much traffic along the Euphrates route. The rivalry between the Parthian state and the Seleucid realm, followed by the political disintegration of Syria in the 60's B.C., had made the Euphrates region dangerous, and as a result trade, or at least that for which we have physical and literary evidence, had tended to pass through the relatively stable Ptolemaic and Nabataean realms to the south. 79

These kingdoms seem to have exploited this situation to their advantage and to have gained considerable income from the proceeds of this trade. The trade through the Nabataean kingdom seems, as far as can be discerned from the literary evidence, to have dealt exclusively in aromatics from southern Arabia. In the first century B.C. Diodorus Siculus mentions that the Nabataeans became wealthy due to their trade in Arabian incense 80, and there is no indication from any source that they were involved in any other commerce such as silk or Indian spices. It is important to bear this in mind, because it has sometimes mistakenly been assumed that overland trade from southern Arabia existed in competition with that along the Euphrates. 81 In fact, the Arabian incense, which originates in South Arabia, could not have been bought along the northerly route, as a quick glance at the map will reveal. 82 Thus, a clear distinction

80 Diodorus Siculus XIX. 94. 5
81 See III. 2 & IV. 1 below.
82 Incense was indeed transported from Southern Arabia to Gerrha near the Persian Gulf, and thence into the Parthian Empire, and it is possible that some of this incense may have found its way into the Roman Empire. However, this is far too circuitous a route to have existed in opposition to the more direct route through Petra. See III. 1 below.
must be made at the outset between the trade in Arabian incense, which originated in southern Arabia and travelled either overland through the Arabian peninsula or by sea to Egypt; and the trade in Indian spices and in silk which passed either overland up the Euphrates route or by sea from India to Egypt.

Before the arrival of the Romans, the Ptolemies had begun to exploit the trade with both India and Arabia by the construction of ports along their Red Sea coast and there is evidence for some commerce throughout the Hellenistic period, but Strabo indicates that the volume of the commerce was not anywhere near as large as in the Roman period. The trade with both the Arabian peninsula and with India was greatly facilitated by the discovery of the use of the monsoons, which enabled the ships trading with India to travel there directly instead of being forced to make a long and dangerous coasting voyage. Prior to this, it appears that few ships made the trip directly, the cargo that did make the journey being transhipped from Indian and Arab ships at one of the South Arabian ports. The *Periplus Maris Erythraei* mentions a time when there were no direct sailings from Egypt to India, but all cargo was transhipped at Eudaimon Arabia (Aden):

Εὐδαίμων Ἀραβία, εὐδαίμων δὲ ἐπεκλήθη, πρότερον ὅσα πόλις, ἄτε, μὴν ἀπὸ τῆς Ἰνδίκης εἰς τὴν Λιγύπτου ἑρχομένων μηδὲ ἀπὸ Λιγύπτου τοµῶντων εἰς τοὺς ἑσών τόπους διαίρειν ἀλλ' ἀρχι ταύτης παραγινομένων, τοὺς παρὰ ἄμφοτέρων φόρτων ἀπεδέχετο, ὡσπερ Ἀλεξάνδρεια καὶ τῶν ἑξωθέν καὶ τῶν ἀπὸ τῆς Λιγύπτου φερομένων ἀποδέχεται.

Eudaimon Arabia was called 'eudaimon', being once a city, when, because ships neither came from India to Egypt nor did those from Egypt dare to go further but only came as far as this place, it received the cargoes from both, just as Alexandria receives goods brought from outside and from Egypt.

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83 S.E. Sidebotham *Roman Economic Policy in the Erythra Thalassa*, 2-4 and I. 5 below.
84 Strabo *Geog.* XVII. 1. 13
85 *Periplus* 26
After the discovery of the monsoon by Greek seamen it was possible to make the sailing directly, and South Arabia’s role in the trade between Egypt and India was reduced to that of a watering point. However, Arabia’s most lucrative trade, that of myrrh and frankincense, was unaffected by this development as these commodities were cultivated within Arabia itself. Thus, there is no reason to believe that the wealth of the southern Arabian kingdoms was dramatically affected by the discovery of the monsoon, as this discovery only affected income from through traffic, not the greater income derived from the local production of aromatics. The date of the monsoon’s discovery has been much disputed but it was clearly well established by the time of the writing of the Periplus, and Strabo’s mention of a vastly increased trade between Egypt and India after the Roman annexation of Egypt would certainly seem to indicate that the monsoon was known and used in his time.

There has arisen a notion among some scholars that there existed before the discovery of the monsoon by the Greeks some sort of South Arabian ‘thalassocracy’ in which the Arabians, exploiting their knowledge of the monsoon, grew wealthy from Indian trade which they jealously kept to themselves by concealing the use of the monsoon from western seamen. This theory is quite fallacious and rests on very dubious interpretation of archaeological evidence which, in fact, lends itself to far

86 L. Casson The Periplus Maris Erythraei, 158-159. It should be noted, however, that the kingdoms of South Arabia continued to trade with India, most probably to supply their own local market for Indian goods (see II. 1 below).
87 For the various opinions put forward see M.G. Raschke “New Studies in Roman Commerce with the East”, 660-663; L. Casson The Periplus Maris Erythraei, 11-12.
more plausible explanation. This ‘evidence’ for the most part consists of items of alleged western provenance found in India and the far East dating from times before the known exploitation of the monsoons by the Greeks. It is concluded from this that the items must have been carried by Arab ships exploiting the monsoon. These items, however, are all either spurious or their presence is capable of far simpler explanation. Indeed, even if the items do in fact date from this time they are not proof of Arab use of the monsoons: they could have been carried there by a limited amount of coasting trade and not necessarily by ships using the monsoons at all. In either case, they certainly cannot be construed as proof of a great South Arabian maritime hegemony in the years prior to the Greek exploitation of the monsoons.

Another argument which is occasionally put forward to support this theory is the fact that cinnamon, which today comes from the far East, is mentioned in western sources earlier than any Greek contact with India. This is then taken as proof that the Arabs must have been carrying this commodity to the West well before the Greeks could have been. However, it should be noted that all ancient literary sources state that cinnamon was a product of Arabia or Somalia, and thus the most likely explanation is that the spice known as cinnamon in ancient times was not the same commodity as the Asian product we know as cinnamon today. In fact, apart from the passage in the *Periplus* cited above, there is no reference at all to the Sabaeans engaging in a through trade in items of Indian commerce. Instead, our sources show

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90 M.G. Raschke “New Studies in Roman Commerce with the East”, 654.
96 J.L. Miller *Spice Trade*, 154-155.
97 Agatharchides frag. 97 *GGM* I, 186; Strabo *Geog.* I. 4. 2; II. 5. 35; XV. 1. 22; XVI. 4. 14,19; XVII. 1. 1 citing Eratosthenes, Hipparchus, Onesicritus and Artemidorus; Pliny *NH* XII. 42.
98 N. Groom *Frankincense and Myrrh*, 85.
99 Sidebotham cites Pliny *NH* XII. 42 as evidence for the importation of Indian cinnamon by the Arabs before the ‘breaking of their monopoly’ in the Roman era (*Roman Economic Policy*, 38), for
that insofar as the Arabians’ wealth was founded upon spices or aromatics, it was derived from frankincense and myrrh, which were native to the area, and not from foreign imports.\textsuperscript{94} Thus, any ideas of a Sabaean thalassocracy are clearly erroneous.

The commerce of the Greco-Roman world with India was, at least as far as our sources reveal, chiefly carried on by Greek ships \textit{after} the discovery and exploitation of the monsoons, and there is no clear evidence that Arab or Indian ships used the monsoon for commerce with the Mediterranean area to any great extent before the Greeks did.\textsuperscript{95} Indeed, so far as can be told from the surviving evidence, Greek and Roman ships were the only ones of this period which would have been sufficiently large and sturdy to survive the stormy north-east monsoon crossing to India.\textsuperscript{96} Thus, even if Arab shipowners were aware of the monsoon prior to the Greek discovery, it remains doubtful that they would have been capable of exploiting it, due to the smaller size and lighter construction of their ships. When all these factors are taken into account it becomes quite clear that the South Arabian ‘thalassocracy’ in fact never existed,\textsuperscript{97} and that the first substantial exploitation of the monsoon to facilitate trade with India was by the Greeks. That commerce, aided by the

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which see also L. Casson “Cinnamon and Cassia in the Ancient World”, in L. Casson \textit{Ancient Trade and Society} (Detroit 1984), 225-246. However, as noted above, the cinnamon Pliny refers to at this reference comes from East Africa and it is most likely that it is a different commodity than that which we call cinnamon today. It is certainly true that Arab ships trading out of Muza and Kané did trade with Northern Indian ports in the first century A.D. (\textit{Periplus} 21, 27), but this must only have been for local consumption, not through traffic, as Indian trade goods are not listed among the items of merchandise available for sale at those ports (\textit{Periplus} 24, 28).
\end{flushright}
exploitation of the monsoons, was already well established by the time Augustus incorporated Egypt into the Roman Empire in 31 B.C.

The Routes of the North

While, as has been discussed, most of the ‘international’ trade that was undertaken at the time of Augustus’ accession went by what Rey-Coquais describes as the ‘routes of the South’, there is evidence that the more northerly routes along the Euphrates were at least known, even if the political situation precluded their use to any great extent. These routes were, according to Strabo, fraught with great difficulties for the traveller because of the exactions of nomadic chieftains along the route, who had perhaps gained in ascendancy after the Seleucids lost control of this area. He stated that for this reason merchants tended to risk a journey into the desert rather than to travel along the river:

diabadwv γαρ ἢ δόδος ἐστι διὰ τῆς ἐπιρήμου μέχρι Σκηνῶν, αξιολόγου πόλεως ἐπὶ τοὺς τῆς Βαβυλωνίας ὄρους ἐπὶ τινὸς διώρογος ἱδρυμένης. ἐστι δ’ ἀπὸ τῆς διαβάσεως μέχρι Σκηνῶν ἠμερῶν πέντε καὶ εἴκοσι δόδος, καμπήται δ’ εἰς, καταγωγὰς ἔχουσε τοτε μὲν ἱδρεύματα εὐπόρους, τὼν λακκαλῶν τὸ πλέον, τοτε δ’ ἐπικταῖς χρῆμινοι τοῖς ἱδασι. παρέχοντι δ’ αὐτῶς οἱ Σκηνίται τὴν τε εἰρήμην καὶ τὴν μετρίωτῃ τῆς τῶν τελῶν πράξεως, ἵς χάριν φεύγουσε τὴν παραποταμίαν διὰ τῆς ἐρήμου πλαταβάλλονται, καταλπόντες ἐν δεξιὰ τῶν ποταμῶν ἡμερῶν σχεδὸν τι τρίων δόδον.

For after the river-crossing the road is through the desert to Scenae, an important city on a canal near the boundaries of Babylon. From the river-crossing to Scenae it is a journey of twenty-five days. There are camel drivers on the road who maintain caravanserais, some well supplied with water, mostly with cisterns, and some where they use water brought in from other areas. The Scenitae are peaceful and moderate in their levying of tolls, for which reason travellers avoid the country by the river and strike out through the desert, leaving the river on the right for a journey of about three days.

99 M. Gawlikowski “Palmyra as a Trading Centre”, 27.
100 Strabo Geog. XVI. 1. 27
Thus, Strabo gives evidence for the use of this route by merchants (for he calls those paying the tolls ἐμπόροι a few lines later) in the mid first century B.C. This route appears, according to Strabo’s description, to have crossed the Euphrates and then passed through the desert between the Tigris and Euphrates until Babylonia was reached.

Whether this abandonment of the Euphrates route was long-term or merely temporary is difficult to say. The route down the Euphrates was certainly in use, and is described by Isidore of Charax in his Parthian Stations, written at about the commencement of the first century A.D. While it is possible that Isidore may have gained much of his information from merchants who used the route, the route is nevertheless not explicitly described as a commercial one. It may be that, even in Isidore’s time and later, merchants sometimes preferred to use the route between the Tigris and Euphrates, avoiding the expensive exactions to be found along the Euphrates. It was no doubt the case that following the Euphrates removed much of the need for caravanserais and watering points, but it may still be that the presence of towns and military establishments, particularly in time of war, made the strategically important Euphrates route too expensive and dangerous for commercial purposes. However, it has to be said that the Euphrates route was the most natural for anyone wanting to traverse this region, and if it were at all possible this would be the route that the traveller would naturally choose; the route described by Strabo would only be

101 While Strabo wrote later than this, his sources date from no later than this time. See M. Gawlikowski “Palmyra as a Trading Centre”, 27.
used when necessity demanded it,\textsuperscript{104} such as during the time of the disintegration of the Seleucid kingdom.

The route which later came into such prominence, that which crossed the Syrian desert via the oasis of Palmyra and thence to the Euphrates, seems unknown to both Strabo and Isidore,\textsuperscript{105} and so it is possible that it did not yet have its later prominence. Appian, however, mentions the existence of Palmyra in 41 B.C. in describing an attack by Mark Antony upon that city. In this account, Appian mentions that the Palmyrenes were merchants involved in carrying goods from within the Parthian realm to Rome:

\begin{quote}
\begin{small}
\begin{verbatim}
εμποροι γάρ διδέσ κομίζουσι μέν ἐκ Περσῶν τὰ Ἰνδικὰ καὶ Ἀραβία, διατίθενται δὲ ἐν τῇ Ρωμαιῶν

For being merchants they carry Indian and Arabian goods from Persia and sell them in the lands of the Romans . . .\textsuperscript{106}
\end{verbatim}
\end{small}
\end{quote}

Thus it is clear that the Palmyrenes had already begun their mercantile activities which were to lead them to such wealth in the centuries to come. Moreover in this, the only literary reference to Palmyra’s role as a trading centre, we find one of the few clues to the nature of the goods being carried: they were Indian and Arabian goods which were brought from within Persia. Whatever evidence there may be for a ‘silk road’ and a coherent trade in silks with China at a later date (which will be discussed), there is certainly none for the first century B.C. The goods being carried through Palmyra, and thus most likely along the Euphrates route and Strabo’s route as well, were Indian and

\textsuperscript{103} Ibid., 106.
\textsuperscript{105} M. Gawlikowski “Palmyra as a Trading Centre”, 27.
\textsuperscript{106} Appian BC V. 9
Arabian goods, most probably spices and aromatics. Moreover, it is clear that these goods were being carried from Persia, that is from within the Parthian realm, and so this trade was not in any kind of competition with that passing through the Nabataean kingdom, the latter apparently exclusively derived from southern Arabia.

Although the northern route was seemingly active in this period, it would still seem fair to say that it had acquired nothing like the prominence it reached during the efflorescence of Palmyra, two hundred years or so later. One has only to compare the splendour of Petra at the time with that of Palmyra which at this point had completed none of the architectural works which were later to grace the city. Petra, on the other hand, was already increasing in wealth and power in the first century B.C. as is attested by both literary evidence and archaeological remains.

*The Effect of the Pax Romana upon the Trade*

It seems clear then that at the accession of Augustus the southern routes were of primary importance: Indian and Arabian goods were transported by ship into the Egyptian Red Sea ports, and Arabian incense was transported overland through the Nabataean realm and thence to the Mediterranean. Nonetheless the evidence also shows that there were some merchants using the northern routes and, as the political situation stabilised and the opportunities for commerce increased, the number of such merchants would have grown greater.

This, then, was the scene when Augustus finally established unquestioned supremacy over the Roman world in 31 B.C. and brought an end to the series of civil wars which had racked the state for so long. The establishment of peace after the
disruption in the previous centuries appears to have had a dramatic and immediate effect on the demand for spices, aromatics and so forth. As discussed earlier, Augustan poets make frequent mention of the commodities which were brought to Rome from the East, reflecting both a greatly increased demand for these goods as well as a readily available supply. It would seem perfectly reasonable therefore to assume, based on the sudden spate of references, that these goods were now more widely available in Roman society, and that the peaceful conditions which Augustus had brought to the Mediterranean basin had allowed this increase in trade. It would then seem probable that it was not anything such as the discovery of the monsoon which caused the upsurge in trade in the Roman period: it was the establishment of peace and prosperity in the Roman Empire by Augustus which allowed the market to flourish and gave merchants the incentive to exploit fully the routes to India and Arabia. 107

Indeed, a dramatic upsurge in trade at the beginning of the Augustan period is reflected in the geographers’ accounts as well as in the Augustan poetry discussed earlier. Strabo mentions the fact that the number of ships sailing to India from Egypt had vastly increased only a few years after the Roman annexation of Egypt, in comparison with the trade under the Ptolemies:

οτε γονδ Γάλλος ἐπήρξε τῆς Ἀιγύπτου, συνόντες αὐτῷ καὶ συναναβάντες μὲχρι Σιήνης καὶ τῶν Ἀθηναίων ὄρων ἱστοροῦμεν ὃτι καὶ ἐκατόν καὶ ἐκοσά νῆς πλέον ἐκ Μυσίδος ὄρμου πρὸς τὴν Ἰνδικήν, πρότερον ἐπὶ τῶν Πτολεμαίων βασιλέων ὀλγῶν παντάπασι θαρροῦσίν πλείπως καὶ τῶν Ἰνδικῶν ἐμπορεύεσθαι φόρτον.

When Gallus was prefect of Egypt, having accompanied him and ascended to Syene and the borders of Ethiopia, we found that even one hundred and

107 L. Casson The Periplus Maris Erythraei, 12.
twenty ships were sailing from Myos Hormos to India, but under the Ptolemaic kings only a very few dared to sail and to trade in Indian goods.108

At another point, Strabo mentions that it had been only twenty ships (presumably these figures mean the number of ships per year) that had sailed for India under the Ptolemies.109 Moreover, it is worth noting that this dramatic increase in trade must have occurred within a very few years of the Roman takeover, since Strabo mentions that he took this trip during the prefecture of Aelius Gallus, thus placing it prior to 25 B.C.110 Similarly, Pliny mentions that due to demand and increased sales a second harvest of frankincense each year had been instituted in southern Arabia.111

It thus seems clear that there was a great increase in the volume of trade immediately after the cessation of the Roman civil wars and the unification of the Mediterranean basin under a single government. We do not need, therefore, to postulate the discovery of the monsoon or the dismantling of any South Arabian thalassocracy to account for the vigour and size of the trade in the Augustan period. It was the development of a greatly increased market for the goods that led to this increase in trade: the mere knowledge of the monsoon, whether by Greeks or South Arabsians, would not be of any use unless there also existed a substantial market for the goods. While the trade existed in the Hellenistic period, it is apparent that it experienced unprecedented growth at the very outset of Roman administration in the area, and that this was due to the existence of a steady and substantial market for the goods. The market came into being due to the newly established peace and prosperity

108 Strabo Geog. II. 5. 12
109 Strabo Geog. XVII. 1. 13
within the Roman Empire after Augustus' victory at Actium in 31 B.C.: this reason is more than enough to explain the vigour and prosperity of the spice and incense trades under the Roman Empire.

Conclusion

At the outset of the period under discussion, then, we find that the trade in aromatics and spices was already well established. The routes in the north, although used, had been restricted somewhat by the political situation in Syria and Mesopotamia, and so the trade in these areas was not as developed. In the more stable south however, a considerable trade was built up, both in Arabian aromatics which were carried for the most part overland through the Nabataean kingdom, and in Indian spices which were brought by sea into the Ptolemaic realm. The Nabataean kingdom in particular seems to have prospered by its position with regard to the caravan routes.

The situation was nonetheless revolutionised by the arrival of the Romans and, more particularly, by the establishment of peace after 31 B.C. Although the routes and articles of trade had been established during or prior to the Hellenistic period, the sheer volume of trade which rapidly appeared after Actium represented a huge quantitative difference from the former situation. While Arab kingdoms could grow prosperous as such peoples as the Gerrhaeans, the Minaeans and the Nabataeans did in the Hellenistic period, only the sheer volume of trade in the Roman period could have allowed the flowering of the Nabataean kingdom that was to take

\textsuperscript{111} Pliny \textit{NH} XII. 32
place in the first centuries B.C. and A.D., or the rise of a city such as Palmyra. The reign of Augustus thus marks the beginning of the large scale 'spice trade' in the Classical world: established on Hellenistic or older precedents, but bringing an unprecedented volume which gave the trade a significance it could not otherwise have possessed.
MAP I.1  THE ROMAN NEAR EAST

Showing the approximate boundaries of Roman provinces as they were in A.D. 118-161, from the abandonment of Trajan’s Parthian conquests to the commencement of Lucius Verus’ Eastern campaign.
MAP 1.2 ROMAN EGYPT

KEY
- Town
- Caravan Track
- Canal

SCALE
0 50 100 150 200km
II. THE RED SEA TRADE IN EGYPT

The Egyptian Red Sea trade is perhaps the best attested, and some might say the most significant, area of the eastern 'luxury' trade of the Roman Empire. While it is indeed difficult to get any accurate idea of the volume of commerce upon any given trade route, it is certainly true that in Egypt we have the most comprehensive literary, archaeological and papyrological evidence of any of the areas through which the trade passed: only in inscriptive material might the Palmyrene trade be considered better supplied. Thus, as well as being able to learn more about the nature of the goods being carried and the routes along which they were brought, in the case of Egypt we have the opportunity of learning something about the type of people who were involved in the trade and the involvement of the government in their encouragement and protection.

The Red Sea had been used for trade even in the Pharaonic period, during which expeditions had been sent to "Punt" (probably Somalia) and to Arabia. However, it was only in the Roman and to a lesser extent the Ptolemaic periods that the trade expanded to the extent that we find it in the period of our study, or indeed that it began to reach as far as India on a regular basis. For the Hellenistic and Roman periods, considerable literary, archaeological and papyrological evidence has come to light which allows us to form an adequate picture of the commerce. While we cannot determine the volume of trade carried, it would seem clear from the evidence available that the trade was a substantial and profitable one in Roman times. Accordingly, it is proposed to examine both the history and nature of the Egyptian Red Sea trade,
coupled with studies of the participants in the commerce and some possible effects of the trade on Roman Egypt. By this means, it is hoped that we can arrive at some understanding of the broader significance of the commerce with respect to the inhabitants of Egypt, the local military and the imperial government.

Although the commerce had existed in the Ptolemaic period, trade in the Red Sea underwent rapid expansion during the reigns of Augustus and his successors. As has already been noted, Strabo records that the trade entering Egypt via the Red Sea experienced a vast increase in volume almost immediately upon the Roman annexation of Egypt. This expansion must be seen as a direct result of the establishment of peace in the Mediterranean basin which attended the end of the Roman civil wars in 31 B.C. It should be noted, however, that the precedents for this trade were laid well before the arrival of the Romans. The Ptolemaic kings established ports on the Red Sea and built protected roads connecting them to the Nile valley, although it is likely that their interests originally lay in obtaining war elephants and gold, not in encouraging trade with India and Arabia. However, the existence of these ports and roads and the high value of the goods which could be obtained in such overseas trade would certainly have encouraged entrepreneurs to make trading voyages to these places, and this is what they seem to have done. This commerce was greatly facilitated by the discovery of the use of the monsoon as discussed earlier, but even with this assistance it would seem that in the absence of peace in the Mediterranean, the trade could not develop fully until the beginning of Augustus’ reign.

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1 I. 5 above.
2 Strabo Geog. XVII. 1. 13
II. 1 Routes and Commodities of the Red Sea Trade

Unlike most other areas of Rome's trade with the East, we are fortunate with respect to the Red Sea trade in that we have an accurate, contemporary account of the commodities with which this commerce dealt, and the lines upon which these goods were conveyed. The *Periplus Maris Erythraei*, written near the middle of the first century A.D., records the goods which were dealt with in this trade, as well as many other significant details about it. Other sources such as Pliny the Elder can tell us something of the commerce, in addition to the contribution which can be made by archaeology, epigraphy and papyrology. These sources reveal a rich and complex trade in goods from India, Arabia and Africa arriving at the Red Sea ports, and a significant quantity of goods as well as gold and silver bullion being exported from the Roman Empire in exchange.

4 S.E. Sidebotham *Roman Economic Policy in the Erythra Thalassa*, 4-6.
5 I. 5 above.
MAP II. 1 THE INDIAN OCEAN IN ROMAN TIMES

Showing the major maritime trade routes as described in the *Periplus*. Geographical terms are those used in the *Periplus*. 

**KEY**
- ○ Towns
- Sea Trade Routes

**SCALE**
0 250 500 750 1000km
The Trade with India

Probably the most significant line of trade to Roman Egypt, based upon the fact that the bulk of the text of the *Periplus* is devoted to describing it as opposed to the trade with Arabia and Africa, was the commerce with India. To reach India, the ships left the Red Sea ports in July in order to catch the monsoon which would convey them directly to India without the need for the long and dangerous coasting voyage. The fierce nature of the monsoon winds, however, meant that the ships to make this crossing had to be sturdy and well-built: as already noted, this fact may have kept Arab and Indian traders from using this route before the Greeks discovered its use. The monsoon would convey the ships to India, according to modern sailing times, in about twenty days, leaving plenty of time before the return trip could commence to catch the north-east monsoon: according to Pliny the ships left India for the return journey in December or January.

There seems to have been a choice of two major areas to which the ships could go in India. One was to India's northwest coast, to two ports referred to in the *Periplus* as Barbarikon and Barygaza. The *Periplus* gives a record of the goods that were brought to these ports as well as the merchandise which could be obtained in them. It relates that there was a market at these ports for wine, glass, metals, coral, textiles, as well as Roman money and frankincense which must have been picked up in Arabia during the outward journey to India. In return, traders could buy there perfumes such as bdellium and nard, precious stones of various types, ivory, cotton

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7 *Periplus* 39, 49, 56
8 L. Casson "Ancient Naval Technology and the Route to India", 10.
cloth and silk, which would have been brought there overland from China.\textsuperscript{11} As will be seen later, the Roman merchants of Egypt were not the only traders from the West in these ports: many Palmyrene inscriptions refer to ships travelling to “Scythia”, which was the name given to this region.\textsuperscript{12} Thus, it seems that this region was a major trading area for the Roman trade with the East by two different routes: one from Palmyra and one from Egypt. The fact that the Egyptian trade was strong in the Antonine period (as will be discussed later in this chapter), the very time of the greatest strength of Palmyra’s trade, also seems to indicate that there was no competition between the two sets of merchants. Rather, as the continued high prices for these goods as recorded in the introduction verify, the demand for the goods in the Roman Empire ensured that the market could comfortably support both lines of trade. As a source of silk, especially, this region would have been extremely significant: indeed it has even been suggested that Scythia was the major source of silk for the Roman Empire,\textsuperscript{13} although this would be impossible to prove given the absence of any figures for the volume of trade. Nonetheless, it does make it quite clear that the silk trade was not dependent upon Parthian co-operation or subject to a Parthian monopoly, as some scholars of the silk commerce have alleged.\textsuperscript{14}

Many ships, instead of travelling to Scythia, took a more direct route across the Indian Ocean which took them to the southern part of the Indian sub-continent. The most important ports in this region were Muziris and Nelkynda.\textsuperscript{15} While it is true that Pliny considered Muziris an undesirable destination due to piracy in the region

\textsuperscript{10} Pliny \textit{NH} VI. 26
\textsuperscript{11} \textit{Periplus} 39, 49
\textsuperscript{12} See IV. 1 below. For the name Scythia for this region see \textit{Periplus} 38.
\textsuperscript{13} M.G. Raschke “New Studies in Roman Commerce with the East”, 630.
and the necessity of using smaller boats to offload and take on cargoes, the prominence given the port in the *Periplus* would seem to indicate that it received a substantial part of the trade. The chief goods obtainable in this region seem to have been pepper and malabathron, with some nard, Chinese silks, and gemstones. By the prominence given it in the *Periplus’* account, however, it would seem that pepper was the chief export of the region. For the most part, it would seem that these goods were purchased with Roman money: the *Periplus* states the main item brought into these ports was προγουμένως χρώματα πλείστα. This is confirmed by the discovery in Southern India of several hoards of Roman coins. Approximately 6000 *denarii* have been found in this region of southern India, along with some *aurei* and other coins. Most of the silver coins are two specific types of Augustan and Tiberian issues, probably showing that the Indians preferred these types of coins, not that this was the peak of trading activity. These hoards immediately bring to mind the complaints voiced by Tacitus and Pliny concerning the outflow of Roman wealth to India; whether or not these hoards really do represent a dangerous outflow of coins, or whether the Romans thought such an outflow existed, will be discussed later in this work.

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15 See V. 2 below.
16 *Periplus* 53
17 Pliny *NH* VI. 26
18 *Periplus* 56. In addition, a Tamil poem from this time describes western ships "arriving with gold and leaving with pepper". See P. Meile "Les Yavanas dans l’Inde tamoule" *JA* 232 (1940), 90-92.
19 Indeed, these coins were most probably imported into India after Nero’s debasement of the coinage in A.D. 64: after this date, merchants would have deliberately chosen earlier coins for trade as they would have greater value in India (where the coins were considered bullion) due to their higher silver content compared to post-reform coinage. See D. MacDowell “Numismatic Evidence for the Date of Kaniska” in A.L. Basham (ed.) *Papers on the Date of Kaniska* (Leiden 1968), 137-138; M.G. Raschke “New Studies in Roman Commerce with the East”, 665-671. For the coins see P.J. Turner *Roman Coins from India* (London 1989), 1-6, 20-26, 120-122.
20 Tacitus *Annales* III. 53; Pliny *NH* VI. 26
21 See VI. 1 below.
Another feature of the port of Muziris worthy of note is the possible presence of a Roman ‘merchant colony’ there. The main evidence for this comes from the *Tabula Peutingeriana*, a medieval map which had a Roman prototype, and which depicts the Roman world as it was in the first century A.D.\(^2\) This map shows a building marked as *Templum Augusti* at Muziris.\(^2\) Such a structure can only have been built there by subjects of the Roman Empire, and presumably ones who were living in Muziris or who spent a significant proportion of their time there.\(^2\) This is supported by two other pieces of evidence. In one case, a papyrus detailing a loan for the purpose of purchasing goods from India mentions “the loan agreements at Muziris”: the loan had therefore presumably been contracted in Muziris with a Roman resident there\(^2\) in order to purchase goods for the return trip home.\(^2\) The other piece of evidence which indicates the presence of resident foreigners at Muziris comes from the *Periplus*. In mentioning the imports into this port, the author lists among the goods mentioned earlier:

\[
\text{σῖτος δὲ δακός ἀρέσει τοῖς περὶ τὸ ναυπλήριον διὰ τὸ μὴ τοὺς ἐμπόρους αὐτῶν χορηγεῖν.}
\]

Enough grain for those concerned with shipping, because the merchants do not use it.\(^2\)

The merchants who do not use grain who are mentioned here are presumably Indians who would have eaten rice; “those concerned with shipping”, by contrast, are

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\(^2\) *TP* XI. 5
\(^2\) That the lender was a Roman and not an Indian is indicated by the fact that the papyrus is in Greek and refers to agents maintained by the lender at the Red Sea ports, at Coptos and at Alexandria. It is most likely that he was a resident of Roman Egypt like the borrower, but who had established himself at Muziris.
\(^2\) *Periplus* 56
presumably resident westerners. That these are not just the crews of Roman ships in the area would seem to be indicated by the fact that this is the only statement of this type in the Periplus: presumably, therefore, the situation at Muziris was different to that found at other ports. Thus, it would seem that the pepper and malabathron trade from southern India was lucrative enough to encourage Roman merchants to settle in the area. Of course, the trade may well have been lucrative enough in other areas of India too, such as at Barygaza and Barbarikon, but perhaps the local rulers prevented the establishment of such a colony at those places.

There is also some evidence of another Roman merchant colony at a place not mentioned in the Periplus. At the site of Arikamedu, on the south-eastern coast of India, there is considerable archaeological evidence of a group of resident westerners during the early centuries A.D. The most recent research indicates that the ‘western quarter’ at this site was active from as early as 250 B.C. through to approximately A.D. 200, presumably indicating that it was first established during the Ptolemaic period but continued throughout the height of the trade in the Roman Imperial period. In addition, the discovery of a coin of Constantine at the site may indicate that it continued, or perhaps was re-inhabited, during the fourth century. Indeed, the apparent decline of the site after c. A.D. 150 based upon the decline in construction after that period may well have had more to do with rising sea levels at the site rather than a decline in trade.

30 V. Begley “Arikamedu Reconsidered”, 461-466.
31 V. Begley “New Investigations at the Port of Arikamedu”, 105.
than the health or otherwise of western trade with the region.\textsuperscript{32} At the port, evidence has been uncovered of many items of western manufacture, including pottery, wine vessels, garum, cloth and glass objects, as well as evidence for glass manufacture at the site.\textsuperscript{33} While these goods may well have been destined for consumption by the westerners at the site, they were probably also sold to the Indians as part of the Red Sea trade. From this evidence, as well as the references to export goods in the Periplus, it is clear that the trade between Rome and India was in many cases a reciprocal one, with goods passing in both directions. This will become significant in the chapter dealing with the attitude of the imperial government to the trade, as there is considerable debate about the 'balance of trade' with India.\textsuperscript{34}

The evident existence of an active western trade station at this location on the east coast of India is very interesting, given the lack of mention of the site in the Periplus, and indeed the general lack of interest that the author of the Periplus seems to have regarding the east coast of India in general. Indeed, the Periplus seems to imply that the strait between Sri Lanka and India was the furthest point normally reached by western vessels trading with India,\textsuperscript{35} and this was most probably due to the fact that western vessels large enough to withstand the monsoon winds which they used to reach India would not be able to negotiate the shallow straits in this area.\textsuperscript{36}

\textsuperscript{32} V. Begley "Arikamedu Reconsidered", 476.
\textsuperscript{33} R.E.M. Wheeler \textit{et al.} "Arikamedu", 17, 34-49, 95-102; J.M. Casal \textit{Fouilles de Virampatnam - Arikamedu}, 35-37; V. Begley "New Investigations at the Port of Arikamedu", 102. These remains have been accepted by all these scholars as evidence for a permanent colony, as the quantity of the artifacts is far greater than would be expected if there had only been occasional visits by western traders.
\textsuperscript{34} See VI. 1 below.
\textsuperscript{35} \textit{Periplus} 51
\textsuperscript{36} L. Casson \textit{The Periplus Maris Erythraei}, 24.
The probable explanation for the existence of the station at Arikamedu is that the western merchants there were involved in the forwarding of the eastern coast goods to such places as Muziris and Nelkynda, where the western ships could pick them up.\(^37\) The *Periplus* states that Gangetic nard and malabathron were forwarded by local ships from the mouth of the Ganges river to Muziris and Nelkynda, where western ships took on the loads for the journey to Egypt.\(^38\) The western merchants of Arikamedu may well have been involved in this forwarding of these goods to their associates in the west coast ports. In addition to the sea traffic in local craft, some of this forwarding may have been done by an overland route across the southern tip of the Indian peninsula. Most of the Roman coin hoards in India which were mentioned earlier are to be found on a communication route between the east and west coasts of the peninsula.\(^39\) This could possibly indicate that Roman trade passed by this route also, and this may have been one way whereby the goods of the east coast reached the ports of the west where Roman ships could pick them up.

Thus, it would seem that the western merchants of Arikamedu were involved chiefly in the forwarding of goods to Muziris and the other ports of the west coast at which ships from Egypt regularly called. Judging by the goods found at Arikamedu, it would also seem reasonably probable that they were involved in the sale of imported Roman goods to the local markets. Despite this, however, it would appear that the east coast of India was only indirectly involved in the sea trade with the Roman Empire.

\(^{37}\) Ibid., 25.
\(^{38}\) *Periplus* 56 (sale at Muziris and Nelkynda) and 63 (origin at Ganges mouth).
\(^{39}\) V. Begley “Arikamedu Reconsidered”, 479.
Trade in the East beyond India

Another place in this area which seems to have become involved in the Red Sea trade is the island of Sri Lanka, generally known to Greeks and Romans as Taprobanë. The author of the *Periplus* mentions the existence of Taprobanë, but it is apparent from his account that he is not using first-hand descriptions, as he greatly exaggerates the island's size and does not state that western ships called there. While according to Pliny, knowledge of the island had existed in the Mediterranean world from the time of Alexander, direct contact began during the principate of Claudius.

He recounts the events by which this occurred:

hactenus a priscis memorata. nobis diligentior notitia Claudi principatu contigit legatis etiam ex ea insula aduectis. id accidit hoc modo: Anni Plocami, qui Maris Rubri uectigal a fisco redemerat, libertus circa Arabiam nauigans aquilonibus raptus praeter Carmaniam, XV die Hippuros portum eius inuectus, hospitali regis clementia sex mensum tempore inbutus adloquo percontanti postea narruit Romanos et Caesarem. mirum in modum in auditis iustitiam ille suspetit, quod paris pondere denarii essent in captiva pecunia, cum diversae imagines indicarent a pluribus factos. et hoc maxime sollicitatus ad amicitiam legatos quattuor misit principe eorum Rachia.

Thus far is known by the ancient writers. We however gained greater knowledge when during the principate of Claudius an embassy actually came from that island. It came about in this way: A freedman of Annius Plocamus, who had gained the contract for the Red Sea tax from the treasury, while sailing around Arabia was carried by the north wind past Carmania, and on the fifteenth day made the port of Hippuros there (i.e. in Sri Lanka). There he was kept by the kind hospitality of the king for six months, learning the language and afterward speaking of the Romans and Caesar. The king gained admiration for Roman honesty because the denarii which were on the captive were all equal in weight, although their diverse images showed they were coined by

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41 For Roman and Greek contacts with Sri Lanka see now P.M. Weerakkody *Taprobanë: Ancient Sri Lanka as Known by Greeks and Romans* (Turnhout 1996).
different persons. He, wishing friendship because of this, sent four envoys, the chief of whom was Rachia.\textsuperscript{42}

Despite this allegedly first-hand evidence, however, the account which Pliny then proceeds to give of the island is wholly fanciful. Nonetheless, Roman contact with Taprobane does appear to date from around this time, as coins from the reign of Nero have been found there. There are, however, only a few coins from this early period: the bulk of the Roman coin deposits in Sri Lanka come from the fourth century and later until well into the Byzantine period, when there appears to have been a strong trade between Sri Lanka and the Mediterranean world.\textsuperscript{43} In the period with which we are dealing, however, there seems to have only been relatively limited contact. For the most part, it would seem that western ships went no further than the southern tip of India until the fourth century.

Of course, there were a few limited exceptions to this general rule, as has already been seen in the cases of the few Romans who went as far as Sri Lanka. Indeed, there is some evidence that might indicate that a few intrepid merchants went much further in search of profitable commerce, perhaps even as far as China. Much of the evidence for these instances actually comes from Chinese court records, which mention some visits both of Chinese emissaries to the Parthian court and Chinese knowledge of the Roman East (which will be dealt with later\textsuperscript{44}), and also those of Roman traders to South East Asia and China. Raschke generally downplays the reliability of these records,\textsuperscript{45} but recently Graf has defended their reliability and the

\textsuperscript{42} Pliny \textit{NH} VI. 24
\textsuperscript{43} A. Dihle "Die entdeckungsgeschichtlichen Voraussetzungen des Indienhandels der römischen Kaiserzeit" \textit{ANRW} II. 9. 2 (1978), 571-573; O. Bopearachchi "Le commerce maritime entre Rome et Sri Lanka d’après les données numismatiques" \textit{REA} 94 (1992), 107-121.
\textsuperscript{44} V. 2 below.
\textsuperscript{45} M.G. Raschke "New Studies in Roman Commerce with the East", 641-642.
earlier interpretations of Hirth and others. Nonetheless, the very existence of Chinese knowledge of Rome, however distorted, implies that there must have been some form of contact and the records of Roman sea voyages to China and South East Asia may well be true. Given that the sea voyage to India was a regular occurrence in this period, it would perhaps be unsurprising if a few sailed further east on at least one or two occasions in search of profit.

The most famous of these accounts is found in the Hou Han shou, or annals of the later Han Dynasty, which cover the period from A.D. 23-220 and which were compiled in the fifth century A.D. These annals record that in A.D. 166 an embassy from the king of Ta-ch’in who was named An-tun arrived from Annam (Vietnam) and sent gifts of ivory, rhinoceros horn and tortoiseshell to the Han court. Hirth identified Ta-ch’in as the Chinese name for the Roman East and An-tun as the Chinese rendering of Antoninus, as the Emperor at that date would have been Marcus Aurelius. While scholars are in general agreement that the ‘embassy’ was in fact simply a group of traders rather than a legitimate embassy, their existence nonetheless provides evidence of Roman merchant activity in the area of South-East Asia.

46 D.F. Graf “The Roman East from the Chinese Perspective” in International Colloquium on Palmyra and the Silk Road. AAS 42 (1996), 199-216. The first attempt to provide an analysis of the place names in the Chinese records and to equate them with Western names, thus accepting the records' basic reliability, was that of F. Hirth, China and the Roman Orient, followed by K. Shiratori in Memoirs of the Research Department of the Toyo Bunko 15 (1956), 1-163. These works generally accept the accuracy of the Chinese records. As noted, Raschke has criticised these works and the reliability of the Chinese records when dealing with Western affairs generally, but in the paper cited at the beginning of this note Graf shows that the Chinese annals can be shown to be a reasonably accurate account. I am grateful to Professor Graf for supplying me with a copy of his paper, which was at the time of writing still unpublished.
48 HHS 88. Abbreviations of Chinese annals throughout this thesis are those used by Hirth.
50 Ibid., M.P. Charlesworth Trade Routes and Commerce of the Roman Empire, 72; E.H. Warmington Commerce, 131, 394; J. Ferguson “China and Rome” ANRW II. 9. 2, 594.

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Such activity is also attested in later Chinese records. The *Liang shu* records some of the events of the period after the collapse of the Han dynasty in 220, although the date of composition in the later seventh century A.D. renders its accuracy on earlier matters somewhat questionable.\(^{51}\) Nonetheless, the record it gives is worth noting. These annals record that in A.D. 226 one Ch’in Lun, a merchant from *Ta-ch’ìn*, arrived in *Chiao-chih* (the Han province of Northern Vietnam) and was sent on to the court of the Wu emperor at Nanjing.\(^{52}\) These same annals also state that merchants from *Ta-ch’ìn* were active in parts of Cambodia and Vietnam.\(^{53}\) These accounts are also reflected in one second century classical source: Ptolemy’s *Geography* describes the “Golden Chersonese”, usually identified as the Malay peninsula, and beyond that the port of Kattigara, which he states was visited by a Greek seafarer named Alexander, who was most probably a merchant.\(^{54}\)

The evidence of the Chinese annals and of Ptolemy is perhaps confirmed by some archaeological discoveries, although they represent only isolated artefacts and cannot be taken as solid evidence of Roman contact. Nonetheless, the discoveries of Roman gold medallions from the reigns of Antoninus Pius and (probably) Marcus Aurelius at the trading port of Oc-eo near Ho Chi Minh City in Vietnam\(^{55}\) give greater credibility to the Chinese and Roman sources which seem to imply Roman trade activity in South East Asia, especially in the Antonine period.

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\(^{51}\) E. Chavannes "Seng Howe" *T’oung Pao* 10 (1909), 199-212; D. Graf "The Roman East from the Chinese Perspective", 204.

\(^{52}\) *Liang shu* 54. 22 a-b

\(^{53}\) D. Graf "The Roman East from the Chinese Perspective", 204.


\(^{55}\) G. Coedes "Fouilles en Cochinchine: Le site de Go Oc Eo, ancien port du royaume de Fou-nan" *Artibus Asiae* 10/3 (1947), 199.
Thus, while the evidence from Ptolemy, from Chinese records and from the discovery of isolated Roman artefacts in South East Asia could never be taken independently to confirm the existence of Roman trade activity in South East Asia, together they may be considered to provide reasonable evidence. This is further strengthened by the fact that all the sources seem to highlight the Antonine period, which is perhaps why this trade is not mentioned in the *Periplus*. It would seem likely, therefore, that in the Antonine period and later some Roman traders began to fare further than India and Sri Lanka and commenced trading activity in the region of Indo-China. From here, it would seem that some of them even ventured as far as China, although such contacts were presumably rare as they would otherwise not have attracted mention in the Chinese court annals.

Nonetheless, such trade was most probably much less significant to the Roman East than was the far larger and better attested trade with India. The bulk of Chinese goods imported into the West probably continued to be bought by Roman merchants in India, simply due to the complexities and time involved in a voyage any further than the western coast of India. Despite this, however, it would seem that some enterprising individuals made just such journeys, and their achievement deserves recognition.

The Trade with Arabia

Far closer to home, however, was another important line of trade, that which dealt with the kingdoms of South Arabia. While these kingdoms were passed by ships sailing to India, the *Periplus* treats Arabia and India as separate lines of trade since
the voyage to these two different destinations had to be made separately. The *Periplus* records that merchants wishing to sail for Arabia should depart in September\(^5\) (in order to arrive at the time of the frankincense harvest), whereas the ships sailing to India had already left in June and would not commence the return journey until December or January. Thus, it is entirely appropriate to describe the trade with Arabia separately from the Indian commerce.

The first major port of call in Arabia was Muza, located within the realm of the King of the Himyarites and the Sabaeans.\(^5\) This port provided a market for various articles of cloth and metalwork, as well as wine, grain and money.\(^5\) In return, traders could pick up myrrh, which was no doubt the chief crop,\(^5\) as well as some marble and goods brought to Muza from Somalia in Arab boats.\(^6\) The author also mentions that the traders of Muza participated in trade with Barygaza, but this must have been for local consumption as the list of commodities which could be obtained in Muza provided in the *Periplus* does not contain any Indian goods, only local and African products.\(^6\)

Beyond Muza along the southern coast of the Arabian peninsula lay the harbours of Ocelis and Eudaimon Arabia, which appear to have only been watering

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\(^5\) *Periplus* 24
\(^5\) *Periplus* 23. For the political geography of the *Periplus* see L. Casson *The Periplus Maris Erythraei*, 45-47.
\(^5\) No coin hoards have been found in South Arabia of the sort that have been discovered in Southern India. However, some Himyarite coins of the first century appear to be copies of Augustan issues similar to those found in India: such coins were most likely imported into South Arabia in trade and copied locally. As with the coins imported into India, the use of Augustan coins is likely to be because of their superior purity rather than an indication of the date of their importation. See D.T. Potts "Augustus, Aelius Gallus and the Periplus: A Re-Interpretation of the Coinage of San'a' Class B" in N. Nebes (ed.) *Arabia Felix: Beiträge zur Sprache und Kultur des vorislamischen Arabien. Festschrift Walter W. Müller zum 60. Geburtstag* (Wiesbaden 1994), 218-221.
\(^6\) *Periplus* 24
\(^6\) *Periplus* 21, 24
stations rather than ports of trade at the time of writing of the *Periplus*. However, this situation appears to have changed in later years, when the two ports became centres of trade. Ptolemy records both of these places as *emporia*, so by his time they must have become active trading ports. When this occurred Ocelis and Eudaimon Arabia presumably traded in the same goods as did Muza, i.e. myrrh and some local marble.

The next ports, and the last major ones in Arabia, were Kanê and Moscha Limen, both in the territory of the “Frankincense-bearing Land”. As one might expect from such a title, the chief item of merchandise available at these ports was frankincense, both grown locally and imported from Somalia. In addition to this, at Kanê merchants could obtain aloe and some goods brought across from Africa. Kanê appears to have been the main port of trade for this kingdom, as the *Periplus* states that all the frankincense in the land was brought there: Moscha Limen only received boats sent on there from Kanê, as well as boats which were returning from India late and wintered at Moscha. At both Kanê and Moscha Limen the frankincense trade was a monopoly of the king of the Frankincense-bearing Land: we should not, however, suppose that such a monopoly extended to all the frankincense grown in Arabia, but simply to that which was grown in this particular kingdom.

This picture of trade as revealed in the *Periplus* has been broadly confirmed by archaeological investigations in the Hadramaut. Remains of Roman goods have been found at several widely scattered sites throughout the region, indicating that the

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63 Ptolemy *Geog*. VI. 7. 7 (Ocelis); VI. 7. 9 (Eudaimon Arabia, under the name of Arabia Emporion).
64 *Periplus* 28
65 *Periplus* 32
trade goods were fairly widely distributed. Such remains include amphorae which were probably used to transport wine, as well as other pottery. The evidence provided by these remains seems to indicate that the trade remained strong throughout the first and second centuries, but then died off in the Severan period, which indeed seems to accord with what happened to the trade in general from the Roman perspective, as will be seen.

Thus, it is evident from the *Periplus* that the chief items of consideration in the Arabian trade were the locally grown incenses of frankincense and myrrh. There may have been a little transit trade in items of Indian provenance, but not enough to attract the attention of the writer of the *Periplus*. The profits to be gained in Arabia, both by the Arab traders and those from Egypt, were quite clearly to be found in the incense traffic, not in transit trade. The traffic with Arabia conducted from Egypt should thus be separated in our minds from the trade with India: the ships left at different times and traded in different commodities; therefore, the prosperity of Arabia was assured as long as there was a demand for its local incenses, and the health or otherwise of the Roman trade with India had no bearing on the situation of the kingdoms of South Arabia. This is important when we bear in mind the notions of a South Arabian 'thalassocracy' which have been entertained by some: such hypotheses are based around a surmised South Arabian knowledge of the monsoons which was kept from outsiders until broken by the Greek discovery of the monsoon and direct

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67 Ibid., 178.
68 II. 6 below.
Roman trade with India.\textsuperscript{69} The \textit{Periplus}, by contrast, shows the kingdoms of southern Arabia enjoying a high degree of wealth and influence, with their ports busy and full of traders.\textsuperscript{70} this situation most probably arose \textit{because} of the Roman trade in incense with these regions. The view that Arabia suffered as a result of the Roman direct trade with India bypassing Arabia would not appear to be supported by the picture of this region found in the \textit{Periplus}. The incense trade with Arabia seems to have been a very significant portion of the trade entering Egypt, although perhaps it was somewhat secondary to the trade with India, judging by the relative portions of the \textit{Periplus} devoted to each of these lines of trade.\textsuperscript{71}

\textit{The Trade with Africa}

The other line of trade which is described in the \textit{Periplus} is that which was conducted along the east coast of Africa. The first ports used by traders to be found in this area south of Berenike on the Egyptian Red Sea coast were Ptolemais Theron, followed by Adulis, both of which were under the rule of a king Zoskales, who appears to have ruled from Axum. These ports, located on the Ethiopian coast of the Red Sea, offered a market for various items from Egypt, mostly clothing and other

\textsuperscript{69} See I. 5 above.

\textsuperscript{70} See e.g. the description of Muza in \textit{Periplus} 21. The South Arabian kingdoms are also described as having possessions on the coast of Africa and in the islands of the Red Sea. Thus Azania, the east coast of Africa from Oponê to Rhapsa (see below) was under the rule of the King of the Himyarites and Sabaeans (\textit{Periplus} 23, 31), while Dioscurides (the island of Socotra) was ruled by the King of the Frankincense Bearing Land (\textit{Periplus} 31). Thus, to the extent that there ever was a South Arabian 'thalassocracy', it would appear to have been alive and well in the first century A.D.

\textsuperscript{71} L. Casson \textit{The Periplus Maris Erythraei}, 12.
manufactured goods, and they exported chiefly ivory and tortoiseshell. Ships wishing to reach these ports departed Egypt in September.\textsuperscript{72}

After these ports came those the author called the “far-side” ports; that is, the harbours of the northern coast of Somalia. These included Avalites, Malao, Mundu and, on the eastern coast of Somalia around Cape Gardafui, the Spice Port and Oponê. These ports offered a market for basically the same things as the Ethiopian ports of the Red Sea but exported frankincense, myrrh and cassia along with ivory and tortoiseshell. In addition to the quantities of these goods which went to Roman Egypt, some was also exported to the ports of southern Arabia on the opposite shore of the Red Sea, and other goods were imported to them from Barygaza in India, although it is not specified whether this trade took place in Roman ships or Indian and Arab vessels. Ships departing Egypt for these ports did so in July.\textsuperscript{73}

South of Oponê, on the east coast of Africa, lay the territory called Azania. The furthest point south on this run which was regularly reached by ships from Egypt was the port of Rhapta, which was on the coast of modern Tanzania, possibly in the vicinity of modern Dar-es-Salaam.\textsuperscript{74} Ivory, rhinoceros horn and tortoiseshell were the chief exports of this region, which was also in continual contact with the southern Arabian kingdom of the Sabaeans and Himyarites, to which the region was tributary. The \textit{Periplus} indicates that seafarers from Roman Egypt ventured no further than this point.\textsuperscript{75}

\textsuperscript{72} \textit{Periplus} 3-6
\textsuperscript{73} \textit{Periplus} 7-14
\textsuperscript{74} See M.G. Raschke “New Studies in Roman Commerce with the East”, 933; B. Datoo “Rhapta: The Location and Importance of East Africa’s First Port” \textit{Azania} 5 (1970), 65-75; L. Kirwan “Rhapta, Metropolis of Azania” \textit{Azania} 21 (1986), 99-104; L. Casson \textit{The Periplus Maris Erythraei}, 141-142.
\textsuperscript{75} \textit{Periplus} 16-18
Thus, the trade route along the eastern coast of Africa, while seemingly secondary to those to Arabia and India, was still of some importance to the merchants of Roman Egypt. However, the merchants with the greatest involvement in this region seem to have been those of southern Arabia, a territory which appears to have had strong political and economic ties with Africa, especially the coasts of Somalia and Azania. Nonetheless, the traders of Roman Egypt appear to have been welcome in these ports too; there was clearly no monopoly of the trade active in any of these harbours.

Indeed, the complete absence of any monopolies on any items is quite apparent when we study the trade described in the *Periplus*, especially that of Arabia and Africa. Instead, we see an entirely free exchange of commodities, with no attempt at restriction apparent anywhere. For example, it appears that Roman shippers could purchase items of African provenance in the ports of South Arabia, as was mentioned earlier. However, it is clear from the description of the trade in Africa that they could also go to the African ports themselves and pick these things up there as well: there is clearly no exploitative Arab monopoly in existence here. In one case, it is stated that the king of the Frankincense-bearing Land controlled the output of frankincense from his kingdom, not allowing any of it to be exported except through the port of Kanê.\textsuperscript{76} This amount included some aromatics brought to Kanê over the water from the “far-side” ports: yet, as we have seen, shippers from Roman Egypt could purchase frankincense directly from the Somalian ports.\textsuperscript{77} Clearly the king’s monopoly only extended to his own realm: traders were able to pick up African frankincense either in

\textsuperscript{76} *Periplus* 27
\textsuperscript{77} *Periplus* 7-12
Kanë or in Somalia, as they pleased. The overall impression gained is that wherever a ship arrived it would be able to pick up a cargo of the local merchandise, and that any monopolies that existed were very local in nature. The evidence for government interference and control in the trade, whether from the Roman government or the Arabian kingdoms, is non-existent.

One last possible line of trade by which African goods may have entered Roman Egypt is, strictly speaking, not a part of the Red Sea trade at all. The kingdoms of Ethiopia, Meroe and Axum, as well as other regions of the African interior, would probably have found it easiest to communicate with Egypt by means of the Nile River, and thus some of the products of the region noted above may possibly have entered Egypt through Syene.  

There are a few ancient literary references which would seem to indicate that this is the case. Philostratus records that bullion, linen, ivory and spices were to be found at the border between Egypt and Ethiopia, to which point the Ethiopians brought these goods. In addition to this, Juvenal mentions that ivory entered the Empire at Syene, which presumably would indicate that it was transported by means of the Nile Valley. Indeed, Pliny relates that the Ethiopians navigated the Nile down to Syene by means of collapsible boats with which they portaged the cataracts of the river, although he does not specify that this was a line of trade, it would seem reasonable that this was the means by which the goods of Ethiopia mentioned by Philostratus and Juvenal were conveyed into Egypt.

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79 Philostratus *Vit. Apoll. Ty.* VI. 2
80 Juvenal *Satire* XIII. 124
81 Pliny *NH* V. 10
Thus, it would appear that some commerce entered the Empire at Syene: ivory and gold would certainly have been prominent in this trade; the spices and perfumes mentioned by Philostratus are impossible to identify, but may well have been frankincense and myrrh from Somalia. Little more can be learned about the conduct of this commerce other than what can be gleaned from Philostratus and Pliny; namely, that the goods were brought to Syene down the cataracts of the Nile by Ethiopians in collapsible boats and were then exchanged with Egyptian goods which the Egyptian merchants had brought to Syene themselves. There is of course no way of knowing the relative proportions of this trade compared to that which entered Egypt by way of the Red Sea, but it is at least clear that some goods of African provenance entered Egypt through the Nile valley.

Conclusion

Thus, it would seem that the Red Sea trade flowing into Egypt in the Roman period was very active and varied. Goods from India such as spices and Chinese silk were imported, along with incense from Arabia and ivory from Africa. We are fortunate indeed that the *Periplus* is able to provide us with such a comprehensive account of the trade routes and the goods available in the Red Sea commerce. Moreover, as we have seen; this account is supplemented in many cases both by other literary sources and by archaeological investigations. By these means, we are able to build up a fairly clear picture of this trade: certainly this understanding is clearer than that which we have from other areas of Rome’s eastern trade, as will be seen.
Another point which is worthy of mention is that the picture the *Periplus* paints of the Red Sea trade shows a commerce substantially free of government interference and regulation, whether it be Roman or foreign. As will be seen, there was some regulation of the commerce by the Roman government, but this was chiefly concerned with the collection of taxes and took place only within the Empire. As far as can be told, however, outside the Empire traders were perfectly free to go where they liked and pick up whatever goods they preferred, controlled only by very limited local direction. There is no direct Roman control evident in the lands of the Red Sea, let alone further afield, and similarly there is no evidence of Arab attempts to control the trade in the areas under their control, even when such control might very well have been possible. All things considered, it seems that the merchants of the Red Sea trade purchased their cargoes and brought them to Roman Egypt in what was basically an unfettered free market.

II.2 The Red Sea Trade in Egypt under the Julio-Claudians and the Flavians

Once the goods had been conveyed up the Red Sea, they would have been landed at one of the Red Sea ports before their journey to the Nile Valley. In the second century A.D., Claudius Ptolemy listed six ports from north to south along the Red Sea littoral: Cleopatris, Myos Hormos, Philoteras, Leukos Limen, Nechesia and Berenike.\(^8^2\) From these ports, then, the ships that carried the trade between Egypt, Arabia and India set out.

\(^8^2\) Ptolemy *Geog.* IV. 5. 8
The Red Sea Ports

The first of these ports, variously called Cleopatris, Arsinoë or Clysma, was located at the modern site of Suez.\textsuperscript{83} While archaeological investigations have shown this site to be a Ptolemaic foundation, it would seem that in the Roman period Clysma was not used significantly as a port of trade until the second century at the earliest,\textsuperscript{84} and thus it will be discussed later.\textsuperscript{85} Similarly, the ports of Philoteras and Nechesia seem not to have been operational in Roman times, as they are not mentioned in the sources which speak of the Roman Red Sea trade. Indeed, they have never been precisely located and thus it is very difficult to say what their periods of use may have been:\textsuperscript{86} the lack of any mention in the \textit{Periplus}, however, shows that these ports were not of any great significance in the Red Sea commerce during the Roman period.

The next port in Ptolemy’s list after Cleopatris, however, is of great importance in the Augustan period. Myos Hormos was, according to several sources, one of the most significant ports of the Red Sea trade in the early Roman imperial period. It and Berenike are the only two Egyptian ports mentioned in the \textit{Periplus} as being active ports of trade at the time of writing,\textsuperscript{87} and Strabo too describes only these ports as the ones involved in trade, saying that in his time Myos Hormos had the greater reputation.\textsuperscript{88} It is clear from this that, whatever significance other ports may

\textsuperscript{83} S.E. Sidebotham “Ports of the Red Sea and the Arabia - India Trade” in V. Begley & R. De Puma (eds.) \textit{Rome and India}, 15-16.
\textsuperscript{84} Ibid. For the excavations at this site see B. Bruyère \textit{Fouilles de Clysma-Qolzoum (Suez), 1930-1932} (Cairo 1966).
\textsuperscript{85} II. 5-6 below.
\textsuperscript{86} S.E. Sidebotham “Ports of the Red Sea and the Arabia - India Trade”, 19-20. In the case of Philoteras, the ancient sources do not even agree as to its location relative to other ports: Strabo and Pliny both place it North of Myos Hormos (Strabo \textit{Geog.} XVI. 4. 5; Pliny \textit{NH} VI. 33), whereas Ptolemy places it to the South (Ptolemy \textit{Geog.} IV. 5. 8).
\textsuperscript{87} \textit{Periplus} 1
\textsuperscript{88} Strabo\textit{Geog.} XVII. 1. 45
have had in the Red Sea trade, Berenike and Myos Hormos were, at least in the first century, the only ones of any great importance. While Strabo, as noted, says that Myos Hormos had a greater importance in his own time, it would seem from the reference to both ports in the Periplus that neither port ever succeeded in entirely eclipsing the other.

The location of Myos Hormos is a vexed question. For many years the most probable contender was the site of ‘Abu Sha’ar, where there are the remains of a Roman fort and a town, causing many to locate Myos Hormos at this site.\(^8^9\) However, recent excavations at ‘Abu Sha’ar have revealed that there was no activity at this site until the third century,\(^9^0\) and consequently it must be rejected as a possible location for Myos Hormos. It should also be noted that the Roman road from the Nile to ‘Abu Sha’ar only seems to have protective installations between the river and the quarries at Mons Claudianus and Mons Porphyritis, and none between those quarries and the Red Sea coast at ‘Abu Sha’ar.\(^9^1\) This may very well indicate that the main function of the road was to service the quarries, and that there was in fact little or no Red Sea trade on the route. If this were not the case, one would expect protective installations all the way to the Red Sea as are found on the routes from the Nile to Quseir al-Qadim and Berenike. Their absence demonstrates clearly that we must look elsewhere than ‘Abu Sha’ar for the site of Myos Hormos.


\(^9^1\) S.E. Sidebotham, R.E. Zitterkopf & J.A. Riley “Survey of the Abu Sha’ar-Nile Road” AJA 95 (1991), 574 (map of road).
Sidebotham has suggested Zeit Bay, to the North of ‘Abu Sha’ar, as a possible site for Myos Hormos, but this location is also affected by the lack of towers on the road from the Nile to ‘Abu Sha’ar. Any trade coming from Zeit Bay to Coptos must necessarily have used this road, and thus the absence of towers on the road past Mons Porphyritis is extraordinary if indeed Zeit Bay is the site of Myos Hormos. One would expect the route to such a significant port as Myos Hormos to have military protection all the way to the port, as indeed is the case with the roads to Berenike and Quseir al-Qadim. Consequently, it would seem most unlikely that Zeit Bay is the site of Myos Hormos.

The site of Quseir al-Qadim, c. 150km South of ‘Abu Sha’ar and lying at the end of a fortified Roman road from Coptos, was excavated between 1978 and 1982 by a team from the Oriental Institute of the University of Chicago. Based upon the coordinates given by Ptolemy and on some documentary evidence from the site, the excavators identified Quseir al-Qadim as Leukos Limen. The documentary evidence for this identification consists of a papyrus fragment and an ostrakon found during the excavation. The former consists of what appears to be a list of soldiers’ names, on the reverse of which is found what seems to be the name and title of the addressee. This line, with restorations by the publisher, reads:

Seren[o c]ura[(tori)] Le[uci Limenis]

To Serenus, the curator of Leukos Limen.

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92 S.E. Sidebotham “Ports of the Red Sea and the Arabia-India Trade”, 19.
93 See I. 2 above for the publications concerning these excavations.
95 R.S. Bagnall “Papyri and Ostraka from Quseir al-Qadim”, no. 18, pp.21-22.
This restoration seems quite reasonable and thus this papyrus seems to refer to a military official known as the *curator Leuci Limenis*, presumably the commander of a small garrison there. In addition to this an ostrakon found at Quseir bears the abbreviation Λευκός Λιμένης, which is assumed to have been an abbreviation for Leukos Limen. To these might also be added a piece of ceramic found in the Wadi Hammamat on the road from Coptos to Quseir al-Qadim bearing what seems to be the destination ελξ Λιμένης, again possibly referring to Leukos Limen. Thus, there is at least a *prima facie* case for regarding Quseir al-Qadim as the site of Ptolemy’s Leukos Limen.

This identification, however, is not without its difficulties. Some scholars have in recent years advocated the idea that Quseir al-Qadim is, in fact, to be equated with Myos Hormos, and thus the relatively minor port of Leukos Limen (which is not mentioned in the *Periplus*) is to be sought somewhere to the south of Quseir. There are, however, some objections to this. Sidebotham has stated that Quseir could not be Myos Hormos due to the apparent lack of any Ptolemaic remains there: Strabo’s sources Agatharchides and Artemidorus wrote of Myos Hormos, showing it must have existed in the Ptolemaic period, whereas the evidence from pottery sherds at Quseir al-Qadim revealed no evidence for occupation earlier than the reign of Tiberius. It should be noted, however, that by no means all of the site was excavated and evidence for Ptolemaic use of the site may still await discovery. In addition, at the beginning of this century Weigall reported some blocks of a Ptolemaic

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96 Ibid., no. 54, p. 40.
temple at this site.\textsuperscript{101} While these remains were not found during the archaeological excavations at Quseir al-Qadim, it may be that the stones were robbed and re-used at the modern town of Quseir, 8 km further south.\textsuperscript{102} Ptolemy’s co-ordinates, too, need not be considered conclusive: his work in this region was only approximate and possibly dependent upon the observations and logs of others.\textsuperscript{103} Against this, the \textit{Periplus} records the distance from Berenike (the site of which is secure) to Myos Hormos as 1800 stadia,\textsuperscript{104} which is exactly the distance between Berenike and Quseir al-Qadim. Clearly, there is at least no reason to reject the identification of Quseir al-Qadim with Myos Hormos out of hand. What then is the evidence which can be adduced to make this identification, and can it be considered any more conclusive than that which is used to identify Quseir with Leukos Limen?

Quseir al-Qadim is connected to the Nile valley by a Roman road well provided with fortified watering places and watchtowers.\textsuperscript{105} Indeed, of all the routes which cross the Eastern Desert from the Nile to the Red Sea, that which crosses from Coptos to Quseir seems to have been the most important, or at least the best protected: the road is equipped with stations approximately every 16-18 km, whereas that from Coptos to Berenike has stations 30-40 km apart.\textsuperscript{106} Bernand’s study of the the inscriptions found along this road\textsuperscript{107} show clearly that it was active and the fortified points were operational in the early Roman imperial period. Of the graffiti on


\textsuperscript{101} A.E.P. Weigall \textit{Travels in the Upper Egyptian Deserts} (London 1909), 61, 81.

\textsuperscript{102} D.P.S. Peacock “The Site of Myos Hormos”, 232.

\textsuperscript{103} Ibid., 231; S.E. Sidebotham “Ports of the Red Sea and the Arabia - India Trade”, 17.

\textsuperscript{104} \textit{Periplus} 1.

\textsuperscript{105} R.E. Zitterkopf & S.E. Sidebotham “Stations and Towers on the Quseir-Nile Road” \textit{JEAn} 75 (1989), 155-189.

the road, three can be securely dated to the reign of Augustus, ten to that of Tiberius,
one each for Claudius, Nero, Titus and Domitian, two of Hadrian and one of
Maximinus Thrax. Thus, it is clear that this road was in extensive use throughout
the first century A.D. and later, coinciding with the apparent period of greatest
activity at Quseir al-Qadim. It is clear that the road and the port are related, and that a
major, if not the only, reason for the existence of this significant road from Coptos to
the Red Sea coast was to connect the port at Quseir al-Qadim to the Nile emporium of
Coptos.

This fact, however, would seem to pose insuperable problems for the
identification of Quseir as Leukos Limen. All our sources speak of only two ports
active in the Red Sea trade at this time, these two being Myos Hormos and Berenike.
Indeed, the Periplus calls these two the only 'designated' harbours in Egypt, by
which is meant a harbour with guards to protect merchants and their ships. Similarly, the Archive of Nicanor mentions both Myos Hormos and Berenike, but
makes no mention of Leukos Limen. The question then that must be asked is this: if
Quseir al-Qadim is Leukos Limen, why is it situated at the end of the most significant
Roman road in the Eastern Desert of Egypt and yet considered too insignificant to be
even mentioned by the Periplus, and too unimportant for the Nicanor family to have
bothered with doing business there? Casson attempts to resolve this difficulty by
stating that Leukos Limen (by which he means Quseir al-Qadim) must have flourished

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107 A. Bemand De Koptos à Kosseir (Leiden 1972).
109 Periplus I
111 D. P. S. Peacock “The Site of Myos Hormos”, 231. For this archive see I. 2 above.
after the writing of the Periplus, but this will not do, as the inscriptive and other evidence from both the road and the port itself make it clear that it was operational in the time of Tiberius, well before the writing of the Periplus. By far the simplest explanation is that the site of Quseir al-Qadim is in fact Myos Hormos - this would account for the significant facilities on the road which connects it to the Nile valley and its intense activity as a trading port during a time when all our sources only refer to two ports active in the Red Sea trade, Berenike and Myos Hormos.

The identification of Quseir al-Qadim with Myos Hormos is also strengthened by its physical similarity to Myos Hormos as described in the classical authors. There are two main accounts describing the harbour; one is that of Agatharchides of Cnidos, which is later also cited by Diodorus Siculus. Agatharchides' account reads:

πλησίον δὲ τής λίμνης εἰςεγείεται πεδίω βεβηκός δρός ἀναφαίνεται ματάδες, ἀλλὰ μὲν οὐδεμίαν ὑποδεικνύου ἢδιότητα, χροιᾶν δὲ τοιαύτην ἀπὸ τῆς κορυφῆς σημαία τῆς ἄκρας, ὥστε τῶν ἀπενεχόντων τὰς ὕψεις ἐπὶ πλέον βλάπτεσθαι. ἐφέξεις δὲ λίμνη μέγας ἐφέκται, δὲ πρότερον μὲν Μυὸς ἐκαλεῖτο ὅμοιος, ἐπεί ταῦτα Ἀφροδίτης ὑώμοιοσθ᾽. ἐν οἷς καὶ νῆσι τρεῖς εἰςοὶ προκείμεναι, ὥσε ἄλλας πεπόκωσται, μία δὲ ἦττων μὲν δασεία, τῶν δὲ μελαγηρίων ἐκτρέφουσα πλῆθος.

Near the lake on a large plain there appears a red mountain, which shows no other peculiarity but shows the same colour from the very peak of its heights, so that the eyes of those who stare at it intently for too long are harmed. Next is a great harbour which was formerly called mussel harbour, but later was named Aphrodite's. In it there are three islands, of which two are covered with olives, and the other is less thickly wooded, but has a great flock of birds called guinea-fowls.

A similar account, clearly referring to the same harbour, is found in Strabo. Strabo, citing Artemidorus, reveals also that the harbour possessed a winding entrance:

112 L. Casson The Periplus Maris Erythraei, 96-97.
113 The Periplus dates from between A.D. 40 - 70 (see I. 2 above), so the port at Quseir al-Qadim must already have been in use when the Periplus was written.
Nearby there is a red mountain in a plain. Then comes mussel harbour, which is called Aphrodite’s harbour, a large port which has a winding entrance. Nearby there are three islands, two covered with olives, while one is less covered and is full of guinea-fowls.\textsuperscript{115}

These passages, then, give a reasonably clear description of the appearance of Myos Hormos. Unfortunately, there are no sites along the Egyptian Red Sea coast which would seem to answer this description. ‘Abu Sha’ar perhaps comes closest, as the islands of the Gebel Zeit archipelago are found offshore. However, it has been pointed out that there are more than three islands in this group,\textsuperscript{116} and it should also be noted that ‘Abu Sha’ar lacks the mountain mentioned in both accounts. In addition, the identification of ‘Abu Sha’ar with Myos Hormos must clearly be rejected due to the archaeological evidence mentioned earlier which shows no evidence of occupation until the third century A.D.

Although today Quseir al-Qadim does not have a natural harbour, being marked only by a small bay in the coastal reef, satellite images have revealed that the coastline in the area has changed dramatically over the years.\textsuperscript{117} These photographs show that what is currently a small indentation in the reef was once a deep, curved channel which led into a lagoon which has now silted up completely. In this lagoon lay three islands, corresponding to the three islands in the classical sources.\textsuperscript{118} In addition, Gebel Hamrawein, the highest mountain in the region, is composed of red

\textsuperscript{114} Agatharchides frag. (x) \textit{GGM} I. See also Diodorus Siculus III. 39. 1-2, citing this passage but also adding the information about the winding entrance to the harbour as contained in Strabo’s account (See below).

\textsuperscript{115} Strabo \textit{Geog.} XVI. 4. 5

\textsuperscript{116} M. Reddé & J.-C. Golvin “Du Nil à la Mer Rouge”, 61.

\textsuperscript{117} D.P.S. Peacock “The Site of Myos Hormos”, 229.
granite and thus corresponds to the ‘red mountain’ described by Agatharchides.\textsuperscript{119}

Thus, Quseir al-Qadim can be seen to answer the descriptions of Myos Hormos given by the classical geographers, further strengthening its identification with that port.

What then of the papyrus and ostraka which appear to refer to Leukos Limen and were found at Quseir al-Qadim? The most obvious point is, of course, the fact that simply because two of these pieces were found at Quseir it does not necessarily follow that Quseir was the place they were referring to. Indeed, the ostrakon marked \textit{\textlambda\epsilon\kappa} does not have to refer to a place at all,\textsuperscript{120} as the word simply means ‘white’ and could be referring to some item of merchandise. It might be noted that there were also ostraka discovered at Quseir which could refer to Myos Hormos,\textsuperscript{121} yet these are not adduced as proof for the identification of Quseir al-Qadim. It has been suggested that Leukos Limen may be the site of a fort further south on the Red Sea coast,\textsuperscript{122} which might account for documents referring to such a site being found at Quseir al-Qadim: messages and consignments passing from the Nile to a site south of Quseir would naturally make use of the Coptos - Quseir road, passing through Quseir al-Qadim on their way south. Alternatively, although Ptolemy lists the two sites separately, he may have in fact confused his sources and Leukos Limen and Myos Hormos could be two names for the same place, or two localities in the same general area. In any case, the evidence as it stands would seem to be most consistent with the identification of Myos Hormos as Quseir al-Qadim, with Leukos Limen perhaps to be identified with some minor site on the coast south of Quseir.

\textsuperscript{118} Ibid., 229-230.
\textsuperscript{119} Ibid.
\textsuperscript{120} M. Redde & J.-C. Golvin “Du Nil à la Mer Rouge”, 63.
\textsuperscript{121} R.S. Bagnall “Papyri and Ostraka from Quseir al-Qadim”, nos. 45, 57; pp. 36, 41.
Concerning the site of Berenike there is no such confusion. This site has been identified as that of Foul Bay, inland from the cape of Ras Banas, and confirmed by inscriptions at the site. This port was initially founded by Ptolemy II in the third century B.C., but came into its most significant period of use in the Roman period, especially in the first century A.D. When Strabo wrote it would seem that Myos Hormos had been the more important port, as this is the port to which he refers most frequently in connection with Indian and Arabian trade.\textsuperscript{123} By the time of the writing of the \textit{Periplus}, however, it would seem that Berenike may have been the pre-eminent port, as all the distances and sailing times given in the work are calculated from Berenike rather than Myos Hormos.\textsuperscript{124} There are natural advantages to Berenike which may explain its greater significance and the fact that it seems to have overtaken Myos Hormos in importance. Even though Berenike is considerably further by land from Coptos, this disadvantage may well have been offset by the longer time it would have taken to sail to Myos Hormos. The winds in the northern Red Sea are predominantly northerlies, and ancient ships with their square rig would have found it difficult to beat against such winds. Thus, Berenike's position as the southernmost of the Egyptian Red Sea ports may well have given it a decisive advantage, as the ships coming to it would not have to beat against the northerlies for so long.\textsuperscript{125} However, it is possible that this natural advantage was offset in the early years by a lack of facilities at the port, which may have been corrected during the reign of Tiberius, thus explaining the early pre-eminence of Myos Hormos and the rising significance of

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{122} D.P.S. Peacock "The Site of Myos Hormos", 231.
\item \textsuperscript{123} Strabo \textit{Geog.} II. 5. 12; XVI. 4. 24; XVII. 1. 45.
\item \textsuperscript{124} L. Casson \textit{The Periplus Maris Erythraei}, 97.
\item \textsuperscript{125} Ibid.; S.E. Sidebotham \textit{Roman Economic Policy}, 51-52.
\end{enumerate}
\end{footnotesize}
Berenike in the first half of the first century A.D. This would seem to be confirmed by the recent archaeological work which has been conducted at the site. These excavations have shown that there is evidence at the port for the construction of harbour works during this period, including what appears to have been a sea wall built in the earlier part of the first century A.D. Moreover, after this work was done, Berenike seems to have maintained its position of pre-eminence, as the archaeological record seems to indicate that the port continued in extensive use throughout the Roman period. Indeed, the predominant position of Berenike throughout this time is apparently confirmed by the fact that Berenike seems to have been the administrative centre for the whole region east of the Nile Valley. This whole region, in the first century A.D. at least, was under the authority of a military governor who in various inscriptions is called the praefectus montis Berenicidae or similar titles.

This official would seem to have been in charge of the ports, as would be indicated by his title, but there is also indication from inscriptions at the quarries in the Red Sea mountains that he was the overall supervisor of the mines and quarries of the area as well. Thus, it would seem that this official was responsible for the control of all the

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127 The excavations so far published indicate that activity at the port peaked in the first and early second centuries A.D. and the fourth through to late fifth centuries, with some activity in the later second century. See S.E. Sidebotham “The Excavations” in Berenike ’95, 94-97. This is reflected in the numismatic evidence from the excavation, in which 21 of the 34 attributable coins found in the 1994 and 1995 seasons were from the first century, and 11 of them were from the fourth and fifth centuries (See S.E. Sidebotham & J.A. Seeger “The Coins” in S.E. Sidebotham & W.Z. Wendrich (eds.) Berenike ’95, 179-185). The pottery evidence shows a similar pattern, with 80% of the material found dating to the first century, and much of the remainder to the fourth and fifth centuries. See J.W. Hayes “The Pottery” in S.E. Sidebotham & W.Z. Wendrich (eds.) Berenike ’95, 147-178.
129 S.E. Sidebotham Economic Policy, 53.
sources of imperial income from the Eastern Desert, both from the mines and from the customs duties payable on the Red Sea trade.

It would therefore seem from the testimony of the *Periplus* and the stationing of the *praefectus montis Berenicidae* at this location that the port of Berenike was the most important of the Red Sea ports, at least after the port was refurbished under the reign of Tiberius. For the remainder of the Julio-Claudian period and throughout the Flavian era, Berenike seems to have been the more important of these ports, although judging by the testimony of the *Periplus* and the evidence of the Nicanor archive it would seem that Myos Hormos continued to be a site of some importance.

No doubt the main role of these ports was as a transit point for the Red Sea trade. However, there seem to have been several ‘spinoff’ effects of the trade which contributed to activity at the ports. In particular, the activities of the agents of various shippers and merchants present at the ports, as is attested in several papyri which will be discussed in the next section, show clearly that these Red Sea ports, despite their remoteness, could be very active communities. In addition, there is the possibility that items for export may have been manufactured at these ports, although conclusive evidence of this has not yet been found in the Berenike excavations. There is some indication of metal and glass production, although it is not immediately apparent whether this was for local consumption or for export.131

Thus, by means of this chain of small ports along the Red Sea coast the merchandise brought from India and Arabia was landed in Egypt. This, however, was far from the end of the journey, as there still remained a long stretch of desert before

131 S.E. Sidebotham & W.Z. Wendrich "Interpretative Summary and Conclusion", 448-449.
the Nile valley and its easy communication with the port of Alexandria was reached. The manner in which this terrain was crossed, and the routes which were used, will be the subject of the next discussion.

The Desert Roads

Once the merchandise of the Indian and Arabian trades had been landed at one of the Red Sea ports, it had to be conveyed overland by a system of fortified roads to the Nile valley. There are several routes which cross from the Red Sea coast to the Nile Valley, but only three of these appear to have been provided with significant Roman fortifications during the earlier Roman Imperial period, making it most likely that these were the only ones in use at that time and that the others were of a Ptolemaic or even Pharaonic date, or at least were only used to a very limited extent in Roman times.

The fortifications with which these roads are equipped allow us to learn something of their function. The most important installations are the *hydreumata*, which are fortified watering points equipped with walls, towers and barracks as well as wells and cisterns for water supply. They are located at roughly one day's journey apart from one another and are sited on the valley floor rather than on defensible high ground, and so are clearly designed for the protection of travellers using the road. In addition to the *hydreumata*, these routes are also equipped with watch or signal towers, small solid towers located usually on the high ground on either side of the route. These towers are intervisible and also usually within sight of the forts on the wadi floor. Although the likely use of these towers is open to some dispute, for now
it will suffice to say that they were clearly related to the forts and were, like them, most likely designed for the protection and observation of the traffic using the road. The nature and precise uses of both the hydreumata and watchtowers will be discussed later in this chapter.

The northernmost of these desert routes is the one which runs from north of Coptos on the Nile to the site of Abu Sha’ar on the Red Sea. As has been discussed earlier, however, there does not appear to have been any traffic from the port at Abu Sha’ar in the first century A.D., as the remains at that site date from the fourth century and so cannot have been used in the early Roman period. In addition, the forts and towers along this route do not go all the way to the Red Sea, but instead only run as far as the mines of Mons Porphyritis.132 If these forts were there to protect Red Sea traffic we would reasonably expect them to go all the way to the sea, but they do not. Thus it is reasonable to conclude that the road from the Nile to Abu Sha’ar was primarily intended for the carriage of the stone from Mons Porphyritis and the products of the other mining settlements along the route, not for the carriage of Red Sea commerce. The unfortified extension of the road from Mons Porphyritis to the sea thus may possibly have been for the supply of fish or shellfish from the Red Sea as food for the miners or something similar; certainly necessary, but not worth the construction of protective installations.

The next route south, that which runs between Coptos on the Nile and Quseir al-Qadim on the Red Sea, does seem to have been involved in the Red Sea trade. This route is clearly one of great significance, as the hydreumata on the road are much

132 S.E. Sidebotham, R.E. Zitterkopf & J.A. Riley “Survey of the Abu Sha’ar - Nile Road”, 574 (map).
closer together than on other roads, at an average distance of 16km. As was mentioned above, the evident importance of this road strengthens the case for the identification of Quseir al-Qadim as Myos Hormos, because a port of such significance in the ancient literary sources would presumably have warranted a significant road. The road is indeed very well furnished with hydreumata and watchtowers, particularly in the more mountainous and remote eastern section of the route.

In contrast with the stations on the Abu Sha’ar - Nile route, the forts on the Quseir - Nile road do not have any outside animal barracks, nor are there any wheel-ruts or evidence of paving on the road itself. This is significant as it allows us to delineate somewhat the two different purposes of the roads. As was mentioned earlier, the road from Abu Sha’ar to the Nile is only equipped with road stations between the Nile and the quarries at Mons Porphyrites; this, combined with the presence of animal barracks at several of the stations and wheel ruts in places along the road indicative of the use of heavy wheeled transport show that quarrying was the main activity on the road in the early imperial period. By contrast, the Quseir - Nile road is equipped with stations from the Nile to the Red Sea, animal barracks are absent and there is no evidence of wheeled transport ever being used on the road. Thus, this particular route seems to have been used by smaller caravans of pack-animals rather than the large draught teams which would have been required for the

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133 For this road see R.E. Zitterkopf & S.E. Sidebotham “Stations and Towers on the Quseir - Nile Road”, 155-189. For the inscriptions on this route see A. Bernand De Koptos à Kosseir.
134 S.E. Sidebotham Roman Economic Policy, 63-64; R.E. Zitterkopf & S.E. Sidebotham “Stations and Towers on the Quseir - Nile Road”, 168.
traffic from the stone-quarries.\textsuperscript{135} This evidence then seems to be in accord with the notion that the spice trade was the main traffic on the Quseir - Nile road: the cargoes of spices and silk were very valuable but relatively small, and it would have been a perfectly manageable arrangement to have brought the animals inside the forts when overnight stops were made. This is not to say that there was no mining at all on this route, as there were gold mines in the region as well as other mining sites; but the presence of stations right to the Red Sea, as well as the archaeological evidence for the use of the port at Quseir al-Qadim at the same time as the road was in use discussed earlier, shows that the Red Sea commerce was the most significant user of this particular road.

The road from Coptos to Berenike appears to be similar in its construction and facilities. This road, the only one of the Red Sea roads described in the ancient sources,\textsuperscript{136} was surveyed by a team from the University of Delaware between 1990 and 1995, during which time numerous classical sites were located, and the \textit{hydreumata} mentioned in the ancient sources were identified.\textsuperscript{137} The pottery from this route indicates that it was chiefly in use between the first and seventh centuries A.D.,\textsuperscript{138} approximately the same period that the port of Berenike was active in the Roman period.

It thus seems that the activity of the port at Berenike was closely associated with the use of the route from Coptos to Berenike. Another route from Berenike to the Nile, which departed the Coptos route at Wadi ad-Dweig and reached the Nile at  

\textsuperscript{135} R.E. Zitterkopf & S.E. Sidebotham "Stations and Towers on the Quseir - Nile Road", 168.  
\textsuperscript{136} Pliny \textit{NH} VI. 26; \textit{Itinerarium Antoniniana} 171.5-173.4; \textit{TP} VIII.  
Edfu, seems to have been the preferred route during the Ptolemaic period but according to the pottery and insessional evidence this route was not used to any great extent in Roman times, although there is some evidence of use in the early Roman period. It seems probable that the Romans consolidated the traffic between Berenike and the Nile on the Coptos to Berenike road at the same time as their improvements to the port at Berenike mentioned earlier. This is perhaps confirmed by a Latin inscription from Coptos which mentions renovations being carried out at numerous sites along the Coptos - Berenike route in the reign of Tiberius, the same time period as the reconstruction of the port at Berenike itself. After a long list of names and Roman military units, the text reads:

Per eosdem, qui supra scripti sunt,
lacci aedificati et dedicati sunt: Apollonos hydreuma VII k. Ianuar.,
Compasi k. Augustis,
Berenicide XVIII k. Ianuar.,
Myoshormi idus Ianuar.;
castram (sic) aedificauerunt et refecerunt.

By the same men who are written above, the wells were built and dedicated: Apollonos hydreuma seven days before the kalends of January, Compasi on the kalends of August, Berenike eighteen days before the kalends of January; at Myos Hormos on the ides of January they built and refurbished the fort.

This inscription, dated to about the reign of Tiberius, would seem to indicate that there was considerable construction activity on the Coptos - Berenike road, as well as some fortification work at the ports of Berenike and Myos Hormos themselves at that time. This then would probably be the time at which the port at Berenike was

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138 Ibid., 50.
139 Ibid.
140 ILS 1. 2483
141 H. Dessau Inscriptiones Latinae Selectae I (Chicago 1979), 494-496.
upgraded, and the commercial traffic from Berenike was redirected to travel along the road to Coptos rather than the earlier Ptolemaic route to Edfu.

It seems clear that, despite the presence of some small-scale mining activity on this road as well, the chief reason for the existence of this route, as with that from Quseir al-Qadim to Coptos, was to service the Red Sea port of Berenike and to provide the caravans leaving that port with their valuable cargoes of merchandise with shelter, water and protection for their journeys. The exact reason why this was done, and the way in which it was achieved, will be discussed later, but there is little room for doubt that this indeed was the reason for the existence of the roads and hydreumata of the Egyptian Eastern Desert.

Coptos

Having traversed the Eastern Desert, the cargoes of goods from the Red Sea now arrived in the Nile city of Coptos, which seems to have acquired an extremely significant place in the Red Sea commerce. As has been noted above, the Romans seem to have consolidated the routes crossing the Egyptian desert so that they all terminated at Coptos. This may very well have been so that the Romans could effectively monitor and control the traffic, although this does not have to be any part of an 'economic policy'. Rather, this was probably done simply to ensure that the caravans traversing the route paid all the taxes and various portoria which they were required to pay. Movements of both goods and persons in Egypt were very

\[^{142}\text{S.E. Sidebotham Roman Economic Policy, 79-82.}\]
heavily regulated throughout the Roman period, and we should be surprised if the traffic from the Red Sea were to have been an exception.

This role for Coptos appears to be confirmed by certain pieces of evidence. The first is in a papyrus which is quoted in full later in this work. This papyrus, P.Vindob. G 40822, is a double-sided document, the verso of which provides a list of goods from India, no doubt the shipment described on the other side of the document, in connection with the 25% customs duty which was imposed on all imports. The recto, however, gives a considerable amount of detail concerning the financing of a commercial expedition to India and of how such an expedition might have been conducted. This document mentions the existence at Coptos of a warehouse for the receiving of customs duties, where goods brought from the Red Sea ports were to be placed under the seal of their owner until such time as they were loaded aboard a freighter for the journey down the river to Alexandria:

\[\text{...[el's ta]s ep'i K\'optos d\'emousias parall\'emutik\'as apothekas kai poi-}\]
\[\text{[\'i\'os u] p\'o t\'h\'n sth\'n \'h\' t\'wv s\'wv epitr\'opwv \'h\' t\'wv par\'wntos a\'ut\'wv}\]
\[\text{[\'exousia]n kai s\'p\'r\'ag\'e\'ida m\'e\'xri potamou e\'mbolh\'s...}\]

\[\ldots \text{to the public customs-house at Coptos, and I will place (them) under the authority and seal of you or of your agents or of whoever of them is present until the loading on the river...}\]

It would thus seem clear that Coptos had a role in the collection of the various duties payable by Red Sea traders. The exact nature of the tax payable at Coptos is not

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143 See II. 3 below.
145 P. Vindob. G 40822 recto, col. 2, 4-6
specified, nor is it mentioned whether or not all trade passing through Coptos had to be placed in this warehouse, or only that which came from the Red Sea ports. Given the very large volume of trade which must have been passing down the Nile all the time, however, it would seem more likely that this customs house was mainly used for taxing items of the Red Sea trade. Thus, it would seem that all goods arriving at Coptos were interned in the customs house under the seal of their owner until the duty was paid, whereupon the goods were released to their owners for transportation down the river. We do know that this tax was not the 25% duty payable on all imports of the eastern trade, as this same papyrus mentions the payment of that duty at Alexandria, as will be discussed shortly. However, it is quite likely that some local customs duty was enforced at this point, as indeed such duties were imposed at many points on the journey through Egypt. The duty at Coptos would seem to have been a particularly important one, as it required the goods to be impounded until the money was paid. According to the account of the journey from the Red Sea to Alexandria contained in P. Vindob. G 40822, such impoundment is mentioned as taking place only twice: at Coptos and at Alexandria.

One duty that may have been payable at this point (although probably not the only duty) are the tolls recorded in the inscription which has become known as the Coptos tariff. This particular tax appears to have been levied by an official known as the arabarch under orders from the praefectus montis Berenicidae upon users of the roads between Coptos and the Red Sea. Thus, this tariff probably represents a toll collected by the military which was designed to pay for the maintenance of the

146 The Ethiopian goods mentioned earlier which entered Egypt at Syene may, however, have been impounded here: alternatively, this may have been done at Syene.
Eastern Desert roads and military stations along them. In the tariff, numerous different types of road user are mentioned, together with the tolls appropriate to that class of user:

εξ ἐπιταγῆς . . .
. . ἵσα δεῖ τοὺς μισθῶν-
τάς τοῖς ἐν Κόπτω ὑποπειπτο-
τος τῇ ἀραβαρχίᾳ ἀποστολίου πράσ-
σειν κατὰ τὸν γυνώματα τῇ ἱ-
στηλῃ ἔκεκερακται διὰ Λουκίου
핼ιτίπτου Ἀσιατικοῦ ἑπάρχου
δρούς Βερενείκης:
κυβερνήτου Ἑρυθρακοῦ ὀρ-
χίας ὀκτώ . . .
πρωγός ὀρχίας δέκα,
ἀρχικόν ὀρχίας πέντε,
[να]ῦτον ὀρχίας πέντε,
[θ]εραπευτοῦ ναυπηγοῦ ὀρχίας
πέντε, χειρότεχνου ὀρχίας
ὀκτώ, γυναικῶν πρὸς ἐταυρί-
μόν ὀρχίας ἑκάτον ὀκτώ,
γυναικῶν εἰσπλεοσοῦν ὀρχ-
χίας ἐκατό, γυναικῶν στραι-
τίων ὀρχίας ἐκατό,
πτυπανοῦ καμήλων ὀβολῶν ἕνα,
σφραγισμοῦ πτυτακίου ὀβολῶν δίῳ,
πορείας ἔξοχομενής ἑκάτον
πτυτακίου τοῦ ἄνδρος ἀναβαινο-
τος ὀρχίας μίαν, γυναικῶν
πασῶν ἀνὰ ὀρχίας τέσσαρας,
ὅνου ὀβολῶν δίῳ, ἀμάξας ἔχο-
σις τετράγωνον ὀρχίας τέσσαρες,
Ιωτοῦ ὀρχίας ἐκατό, κέρατος ὀρ-
χίας τέσσαρες, ταφῆς ἀναφερομε-
νης καὶ καταφερομένης ὀρχίας μία-
ἀν τετράβολον. Εἴτως θ᾽ Αὐτοκράτορος
Καίσαρος [Δωμιτιανό] Σεβαστὸν [Γερμανικό], Παχὼν ἱε'.

From the precept of . . . how much is payable for the duties owing to the arabarch in Coptos, according to the judgment he has written on this stele by Lucius Antistius Asiaticus, prefect of Mount Berenike:

for a helmsman of the Red Sea, eight drachmas;
a ship's lookout, ten drachmas;
a guard, five drachmas;
a sailor, five drachmas;
a shipbuilder's servant, five drachmas;
an artisan, eight drachmas;

147 For a discussion of these officials see II. 4 below.
148 S.E. Sidebotham Roman Economic Policy, 80-81.
women for the purposes of prostitution, one hundred and eight drachmas;
women arriving by ship, twenty drachmas;
women of the soldiers, twenty drachmas;
a ticket for camels, one obol;
a seal for a ticket, two obols;
per outward journey for each ticket of a man going up, one drachma;
all women, four drachmas;
an ass, two obols;
a covered wagon, four drachmas;
an animal horn, four drachmas;
a funeral procession going up and down, one drachma four obols.
Year 9 of the Emperor Caesar (Domitianus) Augustus (Germanicus), the 15th day of the month Pachys

Clearly we cannot pretend to understand all the references contained in this tariff. Nonetheless, it is quite apparent that a system was in place whereby all users of the roads between Coptos and the Red Sea were taxed, and that this tax was collected by the military and was probably used to defray the expenses of the garrisoning of the Eastern Desert. It has been argued that the ἀποστολὰς mentioned in the text should not be considered a road toll but rather a pass or ticket such as were required for travel in many parts of Egypt, and this indeed seems quite likely. Nonetheless, the obtaining of such a pass clearly required payment, and the payment appears to have been made to the military. Thus, the system of passes which existed in Egypt, and rigidly controlled movements within the province as well as exit from it, was clearly applied also to travel in the Eastern Desert. The Coptos tariff can thus justly be seen as both a revenue-raising measure as well as a means of controlling traffic on an important internal route.

149 OGIS 674 = IGRR I. 1183
150 W. Uxkull-Gyllenband Der Gnomon des Idios Logos, II, der Kommentar, Griechische Urkunden V. 2 (Berlin 1934), 64, S.L. Wallace Taxation in Egypt from Augustus to Diocletian (Princeton 1938), 468. See S.E. Sidebotham Roman Economic Policy, 79-81 for the different passes required to leave and to travel in certain areas of Roman Egypt.
Thus, from both the evidence of customs collection at Coptos and the fact that the use of the roads from Coptos were taxed and monitored, it seems that Coptos was an important centre for the control and taxation of the Red Sea trade. However, when we are considering the extent to which the Roman government desired to control the trade, we should bear in mind the rigid control exercised over all aspects of travel in Egypt. Rather than imagine this control as something applied to traffic in the Eastern Desert especially, we should consider it simply as another aspect of the Roman control of all movement in Egypt. Given the valuable nature of the cargoes being carried, and the considerable imperial income which would have been generated from customs dues as well as the wealth from quarries and mines in the area, we should indeed have been very surprised if there had been no such control. Indeed, the centralisation of all the Eastern Desert routes upon Coptos which was accomplished in the reign of Tiberius, as discussed above, may very well have been designed to make this control and monitoring easier.

The role of Coptos, however, was not just a military and administrative one. As will be discussed in the next section, there appears to have been a considerable merchant community at Coptos. Indeed, the situation of Coptos as the roadhead for all the routes in use to the Red Sea would have made it the natural base for traders who were active in this commerce. The Red Sea ports would have been too remote to have acted in this role: Coptos, however, had all the facilities which would have been necessary for these merchants, and was at all times in ready communication with Alexandria by the Nile yet was also at the head of the routes to the Red Sea.
Coptos consequently became an important commercial centre in the Red Sea trade. In the following sections on the conduct of the Red Sea trade and on government involvement in the trade, it will be found that many merchants were based in Coptos along with cameleers who kept the ports and desert settlements supplied, as well as government officials and soldiers. From this high level of mercantile activity, several dependent industries seem to have arisen at Coptos. The city appears to have been involved in the manufacture of certain goods, some of which may well have been used for export in the Red Sea trade. In addition, the city's market was involved in the purchase of silver bullion, which may well have been used in the commerce with India. A letter dating from A.D. 115 mentions the daily fluctuations of the price of silver at Coptos:

\[ \text{τὸ ἀσημόν μὲν ἐστὶ τῇ ὧς γὰρ οἶδας, ἐν Κόπτῳ καθ' ἡμέραν διάφοροι γείνονται τιμαί.} \]

Uncoined (silver) is now 362 (drachmas). For, as you know, the best prices in Coptos change day by day.

While this citation does not mention the eastern trade, it seems to single out Coptos particularly as a place at which the price of uncoined silver varied greatly, presumably as compared to other locations. This fluctuation may well have been a result of the demand from merchants about to sail to India or Africa, who would need large quantities of such bullion. Thus, the silver merchants may well have been able to ask higher prices whenever there happened to be a strong demand for bullion for the Red Sea trade, causing the price of silver to fluctuate.

151 M.G. Raschke "New Studies in Roman Commerce with the East", 851. Coptos appears to have been involved in textile manufacture from the evidence of several ostraka, see WO II. 1081-2; 1084-90; 1616. The type of coarse textile mentioned in these ostraka may be similar to those which were exported in the Red Sea commerce, for which see Periplus 6.
152 P.Giss. 47
Whether or not this is the case, we can nonetheless see that the important role of Coptos in the Red Sea trade is well established, both from the point of view of the activities of merchants and of the government. Its central position in the trade, both in touch with Alexandria and at the head of the routes through the Eastern Desert virtually assured it of a significant role. Accordingly, Coptos became an important centre of mercantile activity, and a vital link in the Red Sea trade. We should note, however, that this role came from the logistic requirements of the trade, such as bullion, goods for export, food supplies etc. Whatever else it was, Coptos does not appear to have been a centre for the actual sale of the goods brought into Egypt via the Red Sea. As has already been noted, the 25% customs duty on imported goods had to be paid at Alexandria, so merchants were presumably not allowed to sell their goods at Coptos. Accordingly, the goods were next loaded onto one of the many freighters plying the Nile for the journey to Alexandria.

Alexandria and the Journey to Rome

The great Mediterranean port of Alexandria was famed for its wealth and its active merchant community, and it was to this port that the goods of the Red Sea trade were brought after their journey down the Nile from Coptos. Unfortunately, the continuous habitation of this site since its foundation has limited the possibilities of archaeological investigation, and it is difficult to learn a great deal about the merchant community of Alexandria other than from the information that is revealed in the

For the city of Alexandria see P.M. Fraser Ptolemaic Alexandria 3 vols. (Oxford 1972); A. Bernand Alexandrie la Grande (Paris 1966); E.G. Huzar "Alexandria ad Aegyptum in the Julio-Claudian Age"
literary sources. Nonetheless, these literary sources, despite their lack of specific information, do provide us with adequate attestation of the existence of Alexandrian commerce and the great significance it enjoyed in that city. Indeed, the wealth of the city and the commercial activity found therein were often commented upon in the ancient world,\textsuperscript{154} and Strabo in particular mentions the important role of the merchant community of Alexandria in the eastern trade.\textsuperscript{155} In view of this, and of the strategic location occupied by Alexandria upon the Mediterranean, yet in constant touch with the interior by the Nile valley, it is hardly surprising to find the city occupying a pivotal role in the Egyptian Red Sea commerce. Indeed, the significance to Alexandria of the Red Sea commerce and the high level of merchant activity there in general is specifically noted by Dio Chrysostom:

\begin{quote}
\begin{minipage}{0.9\textwidth}
...and you also receive goods from the whole Mediterranean sea because of the beauty of your harbours, the greatness of your fleet and by the abundance and selling of the goods of every place; and you have also the power over the outer seas, both the Red Sea and the Indian, whose name was rarely to be heard formerly, so that the trade not only of islands or ports or some straits or isthmuses but virtually the whole world comes to you.\textsuperscript{156}
\end{minipage}
\end{quote}

It is clear then from these references that Alexandria enjoyed great significance as a commercial port, and that the merchandise of the Red Sea trade was no small part of the commerce which passed through the city. It would seem that Alexandria’s focal

\textsuperscript{154} See e.g. Strabo \textit{Geog.} XVII. 1. 13; \textit{HA} Quad. Tyr. 8; Diodorus Siculus XVII. 52. 2; Aristides \textit{Or.} XIV. 321. Strabo describes the city as “the greatest market of the inhabited world” (XVII. 1. 13).
\textsuperscript{155} Strabo \textit{Geog.} II. 5. 12
\textsuperscript{156} Dio Chrysostom XXXII. 36
position at the mouth of the Nile and its heavy involvement with other forms of commerce guaranteed it an important role in the eastern trade.

Thus, it was to Alexandria that the goods of the Red Sea trade came after being conveyed downstream from Coptos. At the conclusion of the journey down the Nile, it would seem (as has already been noted) that the goods were impounded in a public warehouse in order that the government might extract its 25% tax, the so-called τετάρτη. This is recorded in P.Vindob. G 40822, in which the debtor in the document guarantees to place the goods in the warehouse at Alexandria under the seal of the lender:

\[
. . . \text{kai katolow eis tin} \\
(\text{'Alexe}a\nu\betaei}a tis teta\tauth\eta} \text{paralhmpik}h} \text{apodakh}h \text{kai o-} \\
[μοi]\text{pou} \text{upo} \text{tin} \text{sthn} \text{taw} \text{swn} \text{exousian kai sphyagetha} . . . \\
. . . \text{and I will convey (them) to the customs-house for receiving the 25% tax in} \\
\text{Alexandria and I will likewise place (them) under the authority and seal of you} \\
or \text{of your agents} . . .
\]

This seems to be a reference to another impoundment of the goods as happened at Coptos. This time, however, it is explicitly stated which tax was to be taken out at this time: it is the government tax of 25%. While what can be known about the mechanics of this tax will be discussed in the chapter on imperial involvement in the trade, for now it will be enough to note that the goods were placed under seal in this customs-house until the tax was removed, and that Alexandria clearly was the place at which this tax was extracted. Thus, we perhaps have another explanation for the high level of security under which these goods seem to have travelled through Egypt.

157 Presumably the goods would normally be placed under the seal of their owner, but in this case the goods have become security for the loan. See L. Casson "New Light on Maritime Loans", 202-206 and II. 3 below.
158 P.Vindob. G 40822 recto, col. 2, 7-9
besides their great value: it was also necessary to prevent the merchants from selling their goods before they reached Alexandria, as if they did this they would be able to evade the 25% tax. It would seem most likely that this tax was extracted in kind; that is, the merchant simply surrendered one-fourth of his goods, although it may also have been payable in cash. *P.Vindob. G* 40822 mentions the payment, but does not specify in which way it was made.

After this transaction, it would seem that the merchant was then free to do whatever he wanted with his goods. In many cases, merchants may have sold their goods in Alexandria: presumably this is what the debtor in *P.Vindob. G* 40822 had to do in order to pay off his loan.\(^{159}\) On the other hand, merchants who were not so encumbered may have preferred to keep their goods and freight them to Rome or elsewhere. It seems likely, however, that the majority of the goods would have been sold as they emerged from the customs-house at Alexandria: no doubt the government also sold any of the 25% tax which it had extracted in kind at the same time.

One reason the goods emerging from the customs-house were probably sold immediately is that there would most probably have been a considerable market for the raw goods of the eastern trade in Alexandria. It seems from the evidence available that Alexandria was a major centre for the reprocessing of spices, silk and other goods as outlined in the introduction.\(^{160}\) Alexandria had a reputation in the Roman world as a great manufacturing centre,\(^{161}\) and it appears that many of the goods brought there

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\(^{159}\) L. Casson "New Light on Maritime Loans", 205.

from the Red Sea trade were used as a part of this manufacture. Pliny mentions Alexandria as a centre for the reworking of Arabian incenses, and describes what appears to have been a substantial industry for the reprocessing of these goods, complete with extensive security measures designed to prevent the workers from purloining any of the valuable incense:

at, Hercules, Alexandriae, ubi tura interpolantur, nulla satis custodit diligentia officinas! subligaria signantur opifici, persona additur capiti densusue reticulus, nudi emmituntur

But at Alexandria, by Hercules, where the frankincense is prepared for sale, no diligence is enough for guarding the factories! A seal is put on the workmen, a dense mask or net is placed on their heads, and they are sent out naked

Clearly, Pliny is describing a substantial industry: given the demand for these goods which was outlined in the introduction, it would seem that the reprocessing of the goods of the Red Sea trade was a lucrative business indeed for Alexandria. Pliny also mentions the production of textiles at Alexandria, and it would seem at least possible that silk would have been reprocessed there also as part of this textile industry. Certainly there seems to have been a considerable textile industry throughout Egypt, and it would therefore be surprising if such a manufacturing centre as Alexandria were not heavily involved in this industry.

In addition to the goods which were produced from the products of the eastern trade and distributed throughout the Roman world, it is also quite likely that various goods, including textiles and glass, both of which are attested as products of Egypt, were manufactured at Alexandria and shipped to India and elsewhere on the outward

162 Pliny NH XII. 32
163 Pliny NH VIII. 74
164 For the textile industry of Roman Egypt see E. Wipszycka L'industrie textile dans l'Egypte romaine (Warsaw 1965).
leg of the Red Sea trade. The textiles have been already mentioned, and feature often in the lists of goods for which there was a market in India and Arabia in the *Periplus*.\(^{165}\) Glass too was a product of Egypt,\(^ {166}\) and it likewise is a common export from Egypt to the East.\(^ {167}\) Thus, it appears that Alexandria was involved in manufacturing both of goods made from items imported from the East, as well as goods which were made in Egypt and could be exported to India, Arabia and elsewhere. Finally, once all the transactions were complete, the reprocessed goods together with the remaining raw goods were loaded on one of the many freighters bound for Italy or elsewhere which regularly departed Alexandria.

It is therefore reasonably clear that Alexandria was an important centre in the conduct of the eastern luxury trade, both from the point of view of the government, who used it as the place at which they extracted the 25% customs duty, and from the merchants, who bought, sold and reprocessed their goods at this site. While the physical remains of the site are limited as they are covered by the modern city, and it is therefore difficult to build up a clear picture of the role of Alexandria from archaeological remains, enough testimony exists in our literary sources for us to be sure that Alexandria was a site of prime importance in the eastern trade.

\(^{165}\) *Periplus* 6-8, 24, 28, 39, 49, 56
\(^ {166}\) For the Alexandrian glass industry see A.C. Johnson *Economic Survey of Ancient Rome* II, 336; M.I. Rostovtzeff *Social and Economic History of the Roman Empire*, 71; A.K. Bowman *Egypt after the Pharaohs* (London 1986), 221-222.
\(^ {167}\) *Periplus* 6-7, 17, 39
Conclusion

The Egyptian Red Sea trade clearly attained considerable significance during the early centuries of Roman rule in Egypt. During this period the trade experienced a major upsurge in traffic as a result of the establishment of peace in the Mediterranean basin by the Romans, and this led to certain steps being taken by the Romans to accommodate the trade, most notably by the provision of facilities and protection for the traffic. These provisions involved the construction of roads and forts and the provision of soldiers to garrison them, and must have involved considerable expense. This fact shows clearly that the Romans must have had some interest in the promotion and preservation of the trade, even though, as we have seen, that interest was primarily in preserving their tax revenues which the trade provided. Indeed, the lengths to which the Romans were prepared to go in these provisions shows clearly the great value this tax revenue must have represented to the Roman treasury.

In these earlier years, then, much of the pattern was set which was to remain throughout the period of Roman rule in Egypt. As far as can be told, the trade continued to follow the same paths and convey the same goods as had been the case in the Julio-Claudian and Flavian periods. However, there were a few developments in the Antonine period and later which deserve some attention, and these will be the area of study later in this chapter. Firstly, however, it is proposed to examine what can be learned about the participants in the trade, and the manner in which the trade was conducted.
II.3 The Conduct of the Egyptian Red Sea Trade

Following on from the preceding examination of the history of the long-distance 'luxury' trade in Roman Egypt, it will now be pertinent to examine what is known or can be surmised about the individuals and societies active in this trade. As the people involved in the trade were, for the most part, people of relative insignificance in the history of the Roman Empire, we know comparatively little about them. There are, however, some sources which allow us to learn a little about the individuals who operated the trade routes. Indeed, of all the areas of this study perhaps the one with the richest sources of information is Roman Egypt, due to the conditions which prevail in Egypt allowing the preservation of large quantities of papyri and ostraka.

The Merchants of the Egyptian Red Sea Trade

As will be seen, the merchants who participated in the Egyptian Red Sea trade seem to have come from a wide variety of origins. It is obvious from the outset that any ideas of Roman interference to restrict the trade to Roman hands should be rejected, as it is abundantly clear that participation in the trade was open to anyone, Roman or non-Roman alike. Nonetheless, it would seem that at least a significant portion of those involved in the Red Sea commerce came from the Mediterranean world, and so it is to these that we will first direct our attention.

As was discussed in the Introduction, the author of the *Periplus Maris Erythraei* was a Greek-speaking resident of Egypt who was clearly an experienced merchant who had been involved in the trade and possessed great first-hand
experience of the voyages to India and Africa.\textsuperscript{168} Furthermore, the decision of this merchant to write such a practical handbook as the \textit{Periplus}, full of information invaluable to merchants, is a clear indication that there must have been a substantial readership for his work: in other words, there was a significant number of Greek-speaking merchants involved in the trade. It would not be surprising, of course, for residents of Egypt to have dominated the trade, and indeed in one instance Strabo implies that the trade was to a great extent in the hands of the merchants of Alexandria:

\[ \text{τῶν τε Ῥωμαίων καὶ ἕλς τῆν Ἑυδόμονα Ἀραβίαν ἐμβαλόντων μετὰ στρατιῶν νεωτί, ἦν ἤγεσo αὐτῷ φίλος ἡμῖν καὶ ἑταῖρος Ἄλλος Γάλλος, καὶ τῶν ἐκ τῆς Ἀλεξανδρείας ἐμπόρων στάλοις ἴδει πλεόντων διὰ τοῦ Νείλου καὶ τοῦ Ἀραβίου κόλπου μέχρι τῆς Ἰνδίκης, πολὺ μᾶλλον καὶ πατέτα ἐγγυωταί τόσον ἡ τοῖς πρὸ ἡμῶν.} \\

And since the Romans recently invaded Arabia Felix with an army, which my friend and companion Aelius Gallus led, and the merchants of Alexandria are now sailing with fleets by the Nile and the Arabian Gulf as far as India, these places are better known to us than to those before us.\textsuperscript{169}

Given the important position of Alexandria in the Red Sea trade as described in the previous section, it is unsurprising that the merchants of Alexandria were so prominent in the trade. Indeed, it may even be that many of the merchants whom we find resident at Coptos and other similar places in Egypt were in fact based at Alexandria, and simply moved further down the Nile when a shipment arrived.

While many of the merchants involved in the Red Sea commerce seem to have come from Alexandria and elsewhere in Egypt, such a lucrative trade would no doubt have also attracted many other merchants from the Mediterranean to become involved. Indeed, there are various pieces of evidence which refer to just such

\textsuperscript{168} See I. 2 above.  
\textsuperscript{169} Strabo Geog. II. 5. 12
individuals, as well as revealing something of the manner in which these people were involved.

One particularly interesting papyrus actually dates from the Ptolemaic period, but given the Roman reluctance to interfere with a working system it is most likely that the situation in this papyrus can be applied to the Roman period also. The document in question is the text of a loan agreement, by which a consortium of five partners, all with Greek names, arranged a loan to finance an expedition to "the spice-bearing lands". In this text we see what must have been a relatively common arrangement among merchants of limited means: without the finance to support an expedition themselves, a group of merchants gather together and take out a loan which they would then use both to equip their expedition and pay for the transport costs, as well as to purchase the goods at the destination. The sale of these goods, once they had been brought into Egypt, should have provided sufficient funds to pay back the creditors and provide the partners with a reasonable profit. Although we cannot know what proportion of the trade was in the hands of partnerships such as this, it would seem likely that they would have been relatively common, as the number of persons who would have been able to finance an expedition from their own means would have been fairly small. Although no doubt a voyage to any of the sources of the luxury goods imported into Egypt must have been a massive undertaking, the possibility of creating a consortium such as this one in order to make a voyage and hire space on a cargo ship would allow those with insufficient finance to participate

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171 In the Ptolemaic period there was a royal monopoly on the luxury trade, so the purchase would have been bought by the government at fixed rates. Under the Romans, however, the entire trade seems
on their own the chance to become involved in the trade. Thus, Casson's contention
that the India trade (due to the rougher and longer voyage requiring stronger and more
expensive ships) would have been restricted to richer merchants may not
necessarily be the case. Partnerships such as this one may well have allowed small-
scale traders to join in the lucrative India trade.

Of course, such people would still have been among the wealthier members of society, or they would never have been able to contract a loan in the first place; they do not, however, need to have been a part of society's elite. This is illustrated by the papyrus under discussion: of the five guarantors to the loan agreement, four are soldiers in the army. The actual partners to the contract are likely to have been roughly of the same social class (or lower) as their guarantors, and thus we can see that the trade must have been open to a fairly broad band of the members of society in the Mediterranean world.

Other merchants, on the other hand, seem to have participated in the trade on an individual basis. These merchants, when they were not able to finance the trip themselves, would obtain a loan and pledge the goods as security for the repayment of the loan. This situation is illustrated in the papyrus from the Vienna collection, P. Vindob. G 40822, to which reference has already been made. The agreement contained on the recto of this document reads as follows:

{o μένων ου̣ν έτέρων έπ[ι]τρόπων ή φροντιστών και στήσας
[δώσων τ]ῷ σῷ καμηλείτι ἄλλα (τάλαντα) ε[ι]κοσι πρός ἐπίθεσιν τήν εἰς
Κόππον
[ἀνόδον καὶ ἀνοίγω διὰ τοῦ δρο̣ς μετὰ παραφυλακῆς καὶ ἁσφαλεῖας

172 L. Casson The Periplus Maris Erythraei, 34-35.
173 See II. 2 above.
...of your other agents or managers, and I will weigh and give to your camel-driver twenty other talents to be loaded for the road up to Coptos, and I will take (them) through the mountains under guard and security to the public customs-house at Coptos, and I will place (them) under the authority and seal of you or of your agents or of whoever of them is present until the loading on the river, and I will load (them) at an opportune time on the river on a safe boat, and I will convey (them) to the customs-house for receiving the 25% tax in Alexandria and I will likewise place (them) under the authority and seal of you or of your agents, assuming all future expenses from now until the reckoning of the 25% tax, both the passage of the mountains and the boatmen and other expenses according to (my) portion. If, at the appointed time for repayment in the loan agreement at Muziris, I do not then rightly pay off the loan in my own name, then there will be to you and to your agents or managers the option and full authority to exact the amount without notification or summons, to seize and control the aforementioned security and to pay the 25% tax and to transfer the other three-quarters to wherever you wish and to sell, transfer the security or to give it to someone else, as you wish, and dispose of the goods themselves in whatever manner you wish, and
to cause them to be bought at the price current at the time, and to remove and reckon expenses arising from the aforementioned loan, good faith for these expenses being to you and to your agents or managers, there being no legal action of any sort against us. Concerning your investment, shortfall or excess shall be to me, being the borrower and offerer of security.\(^{174}\) 

In this case, then, we can see that the merchant, this time an individual rather than a member of a consortium, has taken out a loan to purchase goods and has pledged the goods purchased as security for the loan. The agreement in the text, as established by Casson, stipulates that the debtor transport the goods to Alexandria and place them under the creditor's name and seal there until the loan has been paid off.\(^{175}\) In this case, the loan was contracted at Muziris in India with a financier who was wealthy enough to provide this kind of finance, as well as maintain agents in Egypt. This person was possibly a member of the Roman 'merchant colony' in Muziris, which was mentioned in the previous section. Without his own means of transport, the merchant paid the shipowner, and later the cameleers, in order to obtain cargo space. Indeed, the verso of the papyrus refers to six parcels which the merchant had loaded aboard the ship *Hermapollon*,\(^{176}\) for which he presumably paid the master of the ship the cost of carriage. The *Hermapollon* was no doubt carrying several such consignments for various merchants, possibly in addition to the cargo of its owner or charterer.

Thus, in this way merchants of relatively limited means could participate in the lucrative trade with India, Arabia and Africa. Either in a consortium or as an individual they could take out a loan and purchase their stock, pledging the stock as


\(^{175}\) L. Casson "New Light on Maritime Loans", 202-206.

\(^{176}\) *P.Vindob. G 40822* verso, col. 2, 27-29
security on the loan. They then arranged for the carriage of the goods to Egypt, where they were conveyed to Alexandria and placed in the public warehouse there, at which time the 25% tax was levied and removed. By the terms of the loan in P. Vindob. G 40822 it would seem that the merchant would then sell the goods in Alexandria rather than convey them to Rome and sell them there, as the loan provisions allow the creditor to seize the goods in Alexandria in the event of default: presumably the way in which the debtor intended to pay off the debt was by sale of the goods, and so we conclude that in this case at least the goods must have been sold in Alexandria. This may well have been the usual practice, although it is difficult to tell as we do not have any parallel examples. Perhaps the financier stipulated Alexandria as the place of repayment to allow himself to seize the goods there if the debtor defaulted, and so allow him to either resell the goods on the spot or transport them to Rome himself if it was advantageous to do so.

Those merchants who were possessed of greater means, however, had no need to finance their expeditions in this way. We also possess evidence for merchants wealthy enough to maintain their own ships, or at least to charter them on a regular basis without the need to obtain loans in order to do so. Indeed, it was probably on the ships of these traders that the smaller operators discussed earlier hired space, and in some cases (such as in the case of the Vienna papyrus) it was to them that they turned in order to obtain their finance. Such wealthier merchants also seem to have maintained agents in various places involved in the trade: we might recall that the lender in the Vienna papyrus seems to have had representatives at both Coptos and Alexandria, as well as the representative with whom the papyrus was actually drawn.
up, presumably at one of the Red Sea ports. Here, we are clearly dealing with people of far greater means than those discussed earlier.

An example of this wealthier type of merchant is afforded by a dedicatory inscription from a temple at Medamoud in the Nile valley. Aelia Isidora and Aelia Olympias were, as the inscription reveals, clearly women of considerable wealth who were able to set up a dedication in a temple, employ an agent and maintain their own ships, or at the very least regularly charter them. The inscription reads:

\[
\begin{align*}
\text{Αλητοὶ θεὶ μεγίστη} \\
\text{Αἰλία Ἱσίδωρα καὶ Αἰλί[α]} \\
\text{Ὀλυμπίας ματρώναι} \\
\text{στολάται ναύκληροι καὶ[]} \\
\text{[ὁμο][ροί ἐμπρακταὶ ᾠ}[α] \\
\text{[. . . Λ]πολιναρίῳ} \\
\text{ἐπάρχ[ω ...]ς Ὀλυμ[—]} \\
\text{πιάδος καὶ [ . . . ]} \\
\text{ἄμφοτέρων [ . . . ]} \\
\text{ἀνέθηκαν [ . . . ]}
\end{align*}
\]

To the great goddess Leto, Aelia Isidora and Aelia Olympias, distinguished matrons, shipowners and merchants of the Red Sea, together with Apollinarios the eparch of . . . of Olympias and (Isidora) both . . . dedicated (this). . .\text{ }

These two women are clearly merchants of more substance than the relatively small players discussed earlier. For one thing, the fact that they were able to make a dedication in a temple implies some wealth, as does their apparent employment of an eparchos, presumably a representative of theirs, but certainly in any case ranking below them in the inscription. The most significant term, however, is the expression ναύκληροι, which indicates that they either owned or chartered merchant ships; in this case, these were ships which were trading on the Red Sea. It is unclear exactly

177 P. Jouguet "Dédicace grecque de Médamoud" BIFAO 31 (1931), 1-29.
178 SB 7539 = SEG VIII. 703
what role Apollinarios had: he may have been the captain of the women’s ships\textsuperscript{180} or, as is probably more likely, their business manager.\textsuperscript{181} In either case, he is clearly ranked below the two women in the inscription and should be considered a subordinate of theirs.\textsuperscript{182}

Aelia Isidora and Aelia Olympias were clearly able to conduct their business on a much larger scale than would have been possible for those merchants who were forced to borrow funds to conduct an expedition to India or some other destination. Very possibly they maintained agents in various places associated with the trade just as the creditor in the Vienna papyrus seems to have done: these would have purchased goods in India and shipped them to Egypt on ships which were either owned or chartered by the women, whereupon they would be conveyed to Alexandria. It is difficult to say exactly how involved the two women were in this trade, but it is probable due to their social standing and wealth that most of the work was done by their agents. However, their involvement seems to have been their primary occupation, as they call themselves merchants and shipowners on their dedicatory inscription - clearly the income generated by their trading activities was enough to sustain them in their social position.

Indeed, Aelia Isidora and Aelia Olympias seem to have been distinguished ladies of relatively high social status. Their possession of the \emph{nomen} Aelia indicates that they or their ancestors had received the Roman citizenship under Hadrian, so this places them in the upper echelons of society. In addition, in their inscription they style themselves as \emph{ματρώαι στολᾶται,} a title of some distinction which implies

\textsuperscript{180}\ M.I. Rostovtzeff \textit{The Social and Economic History of the Roman Empire}, 131-132.
\textsuperscript{181}\ A. Wilhelm "Griechische Inschrift aus Medamut" \textit{AnzWien} 69 (1932), 25-27.
they owned considerable property and could conduct their affairs without a guardian. Thus, we can see that a fairly wide cross-section of people seem to have been involved in the Red Sea trade: from the smaller merchants who perhaps possessed the same sort of social standing as soldiers to the wealthier traders who could afford agents and maintain their own ships, and who most probably would have moved in more exalted social circles.

The archive of Nicanor does indeed mention agents of several different individuals who probably operated in the same way as did the agents of Aelia Isidora and Aelia Olympias. Several individuals, or their agents, are mentioned in the archive as maintaining offices at either Myos Hormos or Berenike, and sometimes at both locations. One Parthenios son of Paminis is attested in the archive as having interests at both Myos Hormos and Berenike, and is also mentioned as the dedicator of a temple inscription at Coptos. Thus it would appear that this man was able to maintain agents at the two Red Sea ports and Coptos, as it would seem the lender in the Vienna papyrus did also. Others, including individuals who appear to be Roman citizens, are also mentioned in the Nicanor archive. All these indicate a considerable merchant community operating in the Red Sea trade, many of whom appear to have been wealthy enough to maintain agents at several locations important in the trade.

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182 S.E. Sidebotham *Roman Economic Policy*, 87.
184 O. Petrie 228, 229 (Myos Hormos), 231 (Berenike).
185 *IGRR* I, 1172
186 S.E. Sidebotham *Roman Economic Policy*, 84.
187 E.g. Gaius Norbanus (O. Petrie 244, 257), whose name is also found on amphora plugs discovered at Coptos (A.J. Reinach “Rapport sur les fouilles de Koptos. Deuxième campagne, janvier-février 1911” *BSFFA* 3 [1912], p. 80 nos. 1471, 1472, 1603), indicating that this individual maintained business interests in both Coptos and Myos Hormos; Tiberius Claudius Agathocles (O. Petrie 275, 276); Gaius Julius Bachyllus (O. Petrie 228, 291). For others see A. Fuks “Notes on the Archive of Nicanor”, 207-216; S.E. Sidebotham *Roman Economic Policy*, 83-86; M.G. Raschke “New Studies in Roman Commerce with the East”, 847-849.
While it seems that some of these merchants might have been resident at Coptos, it would not be unreasonable to think that many would also be members of the merchant community at Alexandria which is described as being heavily involved in the Red Sea trade, as has already been noted above. In any case, there is considerable evidence for the existence of this class of merchant: a relatively wealthy individual who was able to maintain business interests in several locations, and who was involved heavily in the commerce in the Red Sea.

There is also evidence, however, of very important and wealthy personages involved in the trade, who appear to have operated entirely through agents, often their own freedmen. Such individuals, given the attitude to trade and merchants which was prevalent in the Roman world, did not personally involve themselves in the commerce but, like the senators of Rome who conducted their business affairs through intermediaries, maintained some distance between themselves and their investments in the Red Sea trade. Thus, we find their business activities being entirely handled by agents whom they maintained at various places in the trade.

One such individual who is attested in the Nicanor archive is Marcus Julius Alexander, who is mentioned as having business interests at Myos Hormos and Berenike between A.D. 37 and 44. This individual was a member of an extremely rich and influential Jewish family in Alexandria, and was most probably the brother of

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188 On the status of merchants in the Roman world see J.H. D'Arms Commerce and Social Standing in Ancient Rome (Cambridge, Mass. 1981), esp. 159-179; M.I. Finley The Ancient Economy, 60, 144-145; D. Earl The Moral and Political Tradition of Rome (London 1967), 31-32. Generally speaking, commerce was not considered a fit activity for one of Senatorial class, and mercantile activity in particular was looked down upon by members of upper class society. Such attitudes seem for the most part to be mirrored by local aristocracies in individual cities throughout the Empire, although Finley notes that exceptions could arise where merchant activity was peculiarly important to a local economy, as at Palmyra and Alexandria (The Ancient Economy, 59).

189 O.Petrie 252, 266, 267, 271, 282
Tiberius Julius Alexander, prefect of Egypt, and the nephew of the Jewish philosopher Philo.\(^{190}\) Thus we see a prominent member of the *ordo equester* involved in the Red Sea trade. Presumably, of course, such a person would have conducted all his business activities by means of agents rather than personally, but it is nonetheless clear that it was not just relative nonentities in the Roman world who were engaged in the Red Sea trade, but also some rich and very powerful personages.

Another individual who appears to have been of this type was Annius Plocamus, a *publicanus* who had farmed the Red Sea taxes from the Roman government.\(^{191}\) In the account of Pliny which mentions this man, already quoted above in connection with the trade with Sri Lanka, it is stated that in the reign of Claudius a freedman of Annius Plocamus was blown off course while sailing around Arabia. Thus, this freedman was presumably engaged in commercial activities on the Red Sea on behalf of his master when he was blown off course.\(^{192}\) Inscriptions mentioning freedmen of Annius Plocamus have also been found on the route between the Red Sea and the Nile, although these date from A.D. 6.\(^ {193}\) Presumably therefore they indicate the involvement of this family in the Red Sea trade before they also bid for the Red Sea tax contract. This family appears to have been of some importance, and a part of the local aristocracy of Puteoli, an Italian port heavily involved in the eastern commerce.\(^ {194}\) Again, it would appear, we have evidence of the involvement (by means of freedmen agents) in the Red Sea commerce of a person of relatively high social standing, although probably not of the standing of Marcus Julius Alexander.


\(^{191}\) Pliny *NH* VI, 24

\(^{192}\) M.G. Raschke “New Studies in Roman Commerce with the East”, 644.
A third example of a person of high rank being involved in this commerce comes from a later period, the third century. Firmus, who briefly seized Egypt as an imperial pretender after A.D. 272, is described in the *Historia Augusta* as having gained some of his wealth by sending merchant ships from Egypt to India.\(^{195}\) Again, as with the two men mentioned earlier, one would presume that the involvement of Firmus was accomplished by means of freedmen agents who acted on his behalf. In these three examples, therefore, we can see evidence of the involvement of individuals of quite high rank in the Red Sea commerce. Presumably there would also have been others similarly involved, but we have no evidence of them. There is of course the possibility that members of the senatorial class as well as of the equestrian class were involved in the trade, although we have no clear evidence that this was the case. If such persons were involved, however, we could be sure that their involvement would have been well concealed in the activities of their freedmen and clients, given the Roman aristocratic attitude toward trade and the practitioners of trade which has already been noted.

Of course, there would have been numerous opportunities for various persons with capital to have profited as a result of the trade without actually becoming involved, although regrettaably there is no clear evidence which can tell us who they were. Some such may have become involved in the area of financing expeditions in the way the creditor of the Vienna papyrus did, or simply acting as the financial backer of a trip to India. It would appear from the evidence presented that the Red Sea

\(^{193}\) D. Meredith “Annius Plocamus: Two Inscriptions from the Berenice Road” *JRS* 43 (1953), 38-40.
\(^{194}\) M.G. Raschke “New Studies in Roman Commerce with the East”, 644.
\(^{195}\) *HA* Quadr. Tyr. III. 3
commerce could be very profitable, so it would perhaps be surprising if some of the wealthy members of upper-class Roman society were not involved in the commerce.

Direct Imperial Involvement in the Trade

Despite the lack of evidence for the involvement of the senatorial class in general in the Red Sea commerce, some evidence has been put forward to suggest that the emperors themselves may have been involved in the commerce in some way. Indeed, Sidebotham has suggested that all the imperial activity in supporting and encouraging the commerce, including their construction of roads and ports and the provision of military protection for the merchants in the Eastern Desert, can be traced to direct imperial involvement in and profit from the trade. Accordingly, we should examine the evidence Sidebotham offers, as it can both tell us the extent of imperial involvement and offer an explanation for the provisions the Roman government made for the trade. On the other hand, if there turns out to be no evidence of direct imperial involvement in the Egyptian Red Sea commerce, we will be forced to look elsewhere to find the reason for these major works provided by the government.

Sidebotham puts forward evidence from the Nicanor archive, as well as some amphora plugs from the excavation at Quseir al-Qadim, to show the involvement of imperial slaves or freedmen in the Red Sea commerce. It is contended that these pieces of evidence, which mention the names of imperial freedmen or slaves, are proof

197 Ibid., 136. The ostraka are O.Petrie 237, 238, 239, 242 (Tiberius); 258 (Caligula); 290 (Nero). For the amphora plugs, one of which seems to mention an imperial freedman from the Flavian period, see R.S. Bagnall “Epigraphy” in D.S. Whitcomb & J.H. Johnson (eds.) Quseir al-Qadim 1978 Preliminary Report, 243-244.
that the emperors were engaged in the Red Sea commerce by means of their freedmen agents. However, it should be noted that these ostraka and plugs are similar to the remainder of the Nicanor archive, and simply mention the provision of various items of food or other staples to these imperial freedmen. Thus, as Casson has pointed out, the existence of freedmen of the emperor at these ports does not have to indicate that they were actually involved in the trade: they could well have been involved in some area of local government. One area of possible involvement which suggests itself might be the collection of various taxes which were imposed at the Red Sea ports, or the administration of the system of passes which was in force on the Eastern Desert roads, as revealed in the Coptos tariff. While there is no concrete proof for these suggestions, we can equally say that there is no proof that these imperial freedmen were directly engaged in the Red Sea commerce on behalf of their imperial masters.

Accordingly, it would seem somewhat dangerous to construct a hypothesis of imperial encouragement of the trade based upon direct involvement from such questionable evidence. It may indeed be the case that the emperors were involved in the Red Sea commerce in some manner by means of their freedmen, but it has not been proved. Indeed, even if it was the case, it is still a long way from saying that this justified the expense of constructing facilities in the Eastern Desert and providing military protection to the caravans. The profit realised from some limited imperial investment in the commerce would surely not offset the expense of providing all these facilities. We must look for a reason for the construction of these facilities elsewhere than in the protection of direct imperial investment in the Red Sea commerce.

198 L. Casson The Periplus Maris Erythraei, 38.
Non-residents of the Empire Involved in the Trade

As well as the numerous members of Roman society involved in the trade, there is also evidence of merchants from outside the Empire being involved in the eastern commerce of the Empire. The presence of these individuals shows quite clearly that the trade was never a monopoly of any particular group: there is no evidence that the Romans ever tried to restrict participation in the trade in any way. Thus, many of the elaborate theories describing exclusive monopolies in the eastern trade being protected or broken by the Romans are clearly quite fanciful. The evidence for these individuals is certainly fairly incidental in nature and tells us very little about the persons concerned, but it is still significant, and attests to the involvement of various non-residents of the empire in the Red Sea commerce.

Indian merchants are attested at Alexandria in two literary references, showing that Indians visited Roman Egypt: in one case this presence is explicitly stated as being related to trade. Dio Chrysostom mentions that Indians and Arabs were to be seen in the audiences of shows at Alexandria, and in another instance Xenophon of Ephesus mentions an Indian rajah who had come to Alexandria to sightsee and to trade. Archaeological evidence from the Red Sea ports also suggests the involvement of Indians in the commerce. A Tamil-Brahmi graffito was found at Berenike naming a Chera king, Korran, showing the presence at Berenike of Tamil-

\[^{199}\] Dio Chrysostom XXXII. 40
\[^{200}\] Xenophon of Ephesus 3
speaking individuals in the first century A.D. In addition, a Tamil family name has been found among the inscriptive evidence at the Quseir al-Qadim excavation, and this same name has also been found at the excavation of the port of Arikamedu in India. It would thus seem highly likely that Tamil merchants were involved in the Red Sea trade in Roman Egypt, although we are unclear exactly what it was that they were doing. Given the attestation already noted that Indian merchants came to Alexandria to trade, it would not be surprising if these Tamils were merchants also.

Similar evidence has come to light showing the participation of Arabs in the trade. Apart from the mention by Dio Chrysostom cited above, this evidence is epigraphic. The most significant of these inscriptions comes from a temple dedication at Coptos, in which a citizen of Aden in South Arabia who was involved in the Red Sea commerce made an offering to Isis and Hera. This evidence is complemented by three Minaean graffiti found in the Wadi Hammamat on the road from Coptos to Quseir al-Qadim: although the information given in the inscriptions is minimal, the location of the graffiti would seem to suggest that the authors had some involvement in the Red Sea commerce.

Thus there would seem to be clear evidence that non-residents of the Roman Empire were able to participate in the Egyptian Red Sea trade within Roman Egypt itself, and perhaps therefore also further into the empire. This fact is important,
because many scholars have supposed that the Egyptian Red Sea trade was developed by the Romans at least in part to remove non-Roman 'middlemen' such as the Sabaeans and the Nabataeans from their involvement in the commerce. While the validity of this theory with respect to the Nabataeans and other Arabs will be discussed in the following chapter, it should now be noted that the presence of these non-Romans as active participants in the trade in Egypt shows that the exclusion of 'middlemen' was not a driving motive in the Roman policy toward the Egyptian Red Sea commerce. If the Romans intended by promoting the Egyptian commerce to exclude non-Roman elements in the trade, why then would they allow non-Romans to participate freely in the trade within Egypt? Obviously, the Romans did not exclude such individuals from Egypt, and this in turn makes it most unlikely that the Romans ever had any intention of excluding any non-Roman intermediaries in the trade, Arab or otherwise. As far as can be told, participation in the Red Sea trade was open to anyone who had the capital to be so involved, and who was willing to pay the duties that the Romans levied.

Ships and Shipping of the Red Sea Trade

In addition to the merchants who were involved in the Egyptian Red Sea trade, there were several other groups of people who gained their living from the trade in a more peripheral manner. Chief among these would have been those who manned the ships which made the voyages to India, Arabia and Africa. There is some evidence to suggest that there was a reasonably active community of sailors and shipwrights

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207 See II. 4; III. 1 & 2 below.
based in the Red Sea ports, who were engaged in the maintenance and manning of the ships used in the Red Sea trade. Although no wrecks of Roman vessels have been discovered in the Red Sea, it would seem likely that they were similar to those found in the Mediterranean, and were manned in a similar way.\textsuperscript{208} This would appear to be confirmed by the discovery of a late first-century pictorial graffito at Berenike depicting a large square-rigged ocean-going merchantman similar to the types used on the Mediterranean at the time.\textsuperscript{209}

The Coptos tariff provides a list of individuals involved in the manning of ships who needed to traverse the desert to the Red Sea, and these persons generally correspond with the normal crewing of Roman ships, indicating that the ships of the Red Sea trade were crewed in the same way as those of the Mediterranean. The persons of this type listed in the Coptos tariff include "helmsmen of the Erythraean Sea", ship's lookouts, sailors, shipbuilder's servants and artisans.\textsuperscript{210} This variety attests the existence of a sizable maritime community at the Red Sea ports, as well as shipbuilders who perhaps actually constructed ships for the trade, but at least were certainly involved in their maintenance.

The ships manned by these individuals were either owned or chartered by \textit{naĩklnroi}, who have already been mentioned in the course of this section. These individuals, as we have seen, seem to have been more merchants than seafarers: often the inscriptions seem to describe the same people as both \textit{êmuropoi} and \textit{naĩklnroi}. The inscription recorded earlier in this chapter concerning Aelia Isidora and Aelia

\textsuperscript{208} For general information concerning shipping in the Roman world see L. Casson \textit{Ships and Seafaring in the Ancient World}, passim.

Olympias is one example of this: the two ladies were described as ναύκληρου καὶ ἐμποροῦ ἐρυθρακαί, showing that the two occupations were here filled by the same people. Similarly, another inscription from the second or third century describes a group of Palmyrene traders active in the Red Sea commerce in the same terms.\footnote{212}

It thus seems that there were no “shipping firms” or similar arrangements involved in the Red Sea trade: as far as our meagre evidence allows us to investigate, it appears that those merchants who owned ships operated them as an (obviously) necessary part of their business of trading in the merchandise of the Red Sea, but not as a commercial venture in themselves. These individuals would presumably hire the crew members noted above in order to man their ships for the voyage: whether on a per-voyage basis or somewhat more permanently we cannot tell, although it is probable that the hiring was done as a combination of the two. Regardless of which is the case, however, it is clear that the Red Sea commerce provided a living to many individuals who were involved in shipping the goods and maintaining the ships in a seaworthy condition.

*Caravan Transport within Egypt*

Another group related to the conduct of the Egyptian spice trade was the camel-drivers of the Eastern Desert, who were of course indispensable to the successful conduct of the commerce. Elsewhere in the eastern commerce, the camel-drivers who actually conducted the movement of goods over the desert are largely

\footnote{210 OGIS 674 = IGRR I. 1183} \footnote{211 SB 7539 = SEG VIII. 703} \footnote{212 AE LV (1912), no. 171. For these Palmyrene merchants in Egypt see ll. 6 below.}
anonymous. In Egypt, however, we are able to identify some of these individuals and learn something about them.

Of course, the most important information in this regard comes from the archive of Nicanor. We have already noted the value of this archive in supplying names of various individuals who were involved in the Red Sea commerce, but it also gives us the names of those who were actually partners or associates in Nicanor’s business. These ostraka indicate a business in supplying individuals at Myos Hormos and Berenike with assorted goods between 18 B.C. and A.D. 69. From the various ostraka, which with few exceptions consist of receipts for goods received at Myos Hormos or Berenike, we can identify the names of some of those who participated in the business. This family business seems to have consisted of Nicanor son of Panes, Philostratos and Apollos, his brothers, Miresis and Peteharpocrates his sons, and Isidora the daughter of Menodoros, whose affiliation with the family is not clear.213

The ostraka provide evidence of the kinds of goods transported by this company. Interestingly, they do not seem to be trade goods according to the information we have, although some have suggested that this is the case.214 Instead, the goods carried appear to be food and drink, and other everyday items of low value such as mats, medicines, clothing, rope etc.215 All these goods would appear to have been transported by camel, as one ostracon refers to Nicanor as a καμηλότροπος.216

213 A.J. Fuks “Notes on the Archive of Nicanor”, 207-216; S.E. Sidebotham Roman Economic Policy, 83. Isidora’s role is unclear: she was herself unable to write, as is clear from three ostraka which mention her requiring someone else to sign on her behalf (O.Petrie 244, 257; O.Brussel-Berlin 7). She may perhaps have been the wife of one of the men in the family, although in an ostraca found at el-Heita on the Myos Hormos road she appears to address one . . .ρωτενυ, in terms which would indicate he was her husband (D. Meredith “The Myos Hormos Road: Inscriptions and Ostraca” CE 31 (1956), 356-358). Her role, although established, therefore remains unclear.
216 O.Petrie 224
and the Vienna papyrus already discussed also refers to the transport of goods by camel in this region.

The business would thus appear to have been one concerned with the provision of the necessities of life to those resident in the Red Sea ports of Myos Hormos and Berenike. Clearly these places were heavily, if not entirely, dependent upon the Nile valley for the provision of food, drink, and anything else necessary for the continued running of an office at one of the ports, and thus the opportunity existed for enterprising cameleers to gain a living by the supply of these necessities. The papyri and ostraka excavated at Quseir al-Qadim also reflect this: many of them are also concerned with the supply to the port of goods similar to those mentioned in the Nicanor archive.217

There is no immediate reason apparent why the Nicanor business was not involved in the transport of the valuable trade goods. There are, however, a few possibilities which might be suggested, although there is no evidence for any of them. One may be that the archive which was found only dealt with one-way traffic from Coptos to the Red Sea, whereas the return traffic (which would of course include the trade goods) was recorded elsewhere and has not been found: if this, however, were the case then one might expect that the receipts found would include mention of goods destined for export (such as glass, textiles and silver), which they do not. Another possibility is that the government may have licensed certain camel drivers to carry the trade goods, and the Nicanor business was not included in that number. It may also be possible that the merchants of the Red Sea trade employed their own camel drivers

217 R. Bagnall "Papyri and Ostraka from Quseir al-Qadim", 6, nos. 2, 21, 24, 28, 44.
and guards to carry the valuable goods, and only employed independent firms such as Nicanor's for the transport of staples which did not require any degree of security. However, these ideas must remain speculation in the absence of any evidence.

The existence of separate caravans for the expensive import goods may, however, be implied in the Vienna papyrus, where the writer refers to "your" (i.e. the creditor's) camel driver, implying that the driver in question was either permanently employed by the creditor or at least had been exclusively engaged by him for this particular trip.\(^{218}\) Thus, whereas businesses such as Nicanor's shuttled their goods up and down the desert roads all year,\(^{219}\) it would seem that the sizable caravans carrying the imported goods from the east were specially organised when the boats returned from India and Arabia. As the boats from each destination would all arrive at approximately the same time, due to the fact that they were all dependent upon the monsoon for their return voyage,\(^{220}\) the organisation of these caravans would be limited to, at most, a few months of the year.

Thus, before the arrival of the ships, the agents of the merchants in Myos Hormos and Berenike would begin to organise caravans for the transporting of their master's goods to Coptos. Cameleers, some of whom appear to have included Nabataean Arabs, presumably brought into Egypt because of their expertise in desert transport,\(^{221}\) would be hired and assembled and guards provided. That there were guards for these caravans seems likely: \textit{P.Vindob.} G 40822 mentions the caravan

\(^{218}\) \textit{P.Vindob.} G 40822 recto, col. 2, 2
\(^{219}\) A.J. Fuks "Notes on the Archive of Nicanor", 213.
\(^{220}\) See II. 1 above.
\(^{221}\) See III. 3 below.
proceeding "under guard", and the Coptos tariff also mentions a cost for a guard to travel the road. These guards do not appear to have been Roman soldiers, but private guards, as the wording of the Vienna papyrus implies that it was the responsibility of the writer to organise them. Of course, as the caravan proceeded along the roads in the Eastern Desert, it would also have come under the supervision and protection of the Roman soldiers based in their hydreumata and watchtowers.

We can, therefore, see that the existence of the Egyptian Red Sea trade was able to provide a livelihood for several dependent industries in Egypt, one of which was the business of providing camel transport both of the import goods themselves to Coptos and of consumables to the various agents and employees resident at the Red Sea ports and operating the ships. In addition, the goods exported from Egypt as part of the Red Sea trade were also presumably transported over the desert by this means, although we have no evidence that this was the case.

Conclusion

Thus, we can identify a wide variety of people who were involved in the Egyptian Red Sea trade. These individuals vary widely in their relative wealth and social status, ranging from the freedmen agents and administrators as well as those listed in the Coptos tariff who also drew an income from the trade in some way or another, right up to perhaps the emperor himself. Unfortunately, we are unable to determine what effect this income from the trade might have had on the society of

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222 P. Vindob. G 40822 recto, col. 2, 3
223 OGIS 674 = IGRR 1. 1183
Egypt as a whole, or in what way it might have affected the economy of the province, due to the absence of any trade figures of real significance.

What does seem clear, however, is that the trade was of sufficient volume to provide many individuals, including some of considerable wealth, with a reliable source of income. This applies not only to those who were directly involved in the trade as merchants, but also to people who were involved in peripheral industries which nonetheless relied substantially on the eastern commerce, such as Nicanor’s transport business and the shipbuilders and craftsmen who maintained the ships of the Red Sea trade. In all these areas, the trade was clearly significant enough to provide these individuals with a living. The possibility thus exists of the commerce exerting at least some influence on the political and economic makeup of the province of Egypt, if not on the Roman East as a whole. Indeed, this picture of the importance of the trade would seem to be confirmed by what appears to be a heavy government involvement in certain aspects of the commerce.

II.4 Government Involvement in the Red Sea Trade

As will be seen throughout this work, there is little or no evidence to show that the Romans ever allowed the spice or silk trades to influence their foreign policy to the extent that they went to war to secure some economic advantage involving the trade. There is, however, considerable evidence to show that the Roman government was involved in the trade quite deeply. One significant area of governmental involvement is the collection of customs duties by government officials. In addition, the Roman military was deeply involved in the protection of the trade in Roman
Egypt, particularly on the Red Sea coast and on the desert journey from that coast to the Nile valley. Earlier in this chapter we have seen how the roads from the Red Sea ports were well equipped with fortifications and watchtowers, and that it is quite clear that the function of these fortifications and of the soldiers in them was the protection and shelter of the traffic using these routes, that is, the caravans from the Red Sea together with the products of the mines and quarries in the area. We might well then ask these questions: in what way did the Romans offer protection to the caravans, and against what kind of threat was this protection intended? In addition, what role was fulfilled by the Roman officials who were involved in the trade? By examining the evidence which exists dealing with these areas, it is hoped that some conclusions can be reached concerning the reason for the government involvement in the Egyptian Red Sea commerce, and the existence or otherwise of a coherent Roman trade policy toward this commerce.

**Government Officials and the Collection of Customs Duties**

First, however, it will be necessary to examine the involvement of various members of the Roman administration in Egypt with the trade. This involvement generally revolved around the collection of taxes and customs duties. In the course of the journey from the Red Sea ports to Alexandria, the merchants of the Red Sea trade would encounter several Roman government officials, both civilian and military. While some of these individuals were involved in the administration and monitoring of all traffic in Egypt, some of them appear to have performed tasks which were specific to the Red Sea trade.
This involvement seems to have begun as soon as the ship landed at one of the Red Sea ports. When they docked, the ships entered the territory under the jurisdiction of the praefectus montis Berenicidae, but the official with whom the merchants had to deal immediately was a functionary known as the arabarch. This official is known to have fulfilled two functions with respect to the Red Sea trade, both to do with the collection of duties and tolls of various types.

The first function of the arabarch is seen on the verso of P. Vindob G 40822, which gives a list of goods carried in the shipment in question and includes mention of some goods being removed by the arabarch at the time of the ship's arrival in Egypt. The document states that small proportions of ivory and fabric which had been imported were removed by the arabarchs at the Red Sea port of arrival: ivory tusks to the value of 1175 drachmae out of a total value of 76 talents 5675 drachmae, or approximately 0.25%; and fabric to the value of 1592 drachmae 3 obols out of a shipment to the total value of 8 talents 5882 drachmae 3 obols, or circa 2.88%.224

There are several points in this papyrus which warrant mention. Firstly, the account mentions goods removed ὑπὸ τῶν Ἀραβάρχων, whereas elsewhere the office is always referred to in the singular.225 It thus may be that there were in fact several of these officials, as the other citations do not actually require that there only be one arabarch at a time; alternatively, the office might have been made a multiple one for a short time and then changed back to being a single office. In the absence of

any other information it is difficult to tell, but the Vienna papyrus certainly indicates that at least at one time there could be more than one person filling the post of arabarch. Another point of interest is the differing rates of duty levied on different goods. The shipment of 60 containers of Gangetic nard does not appear to have been levied at all; the ivory attracted a levy of 0.25% whereas the cloth was taxed at about 2.88%. It may have something to do with the bulkiness of the items, as the tax is higher on the item with the least value per pound, the cloth. The cloth is valued at 70 drachmae per mina of weight, whereas the ivory was valued at 100 drachmae per mina. The weight of each of the 60 containers of nard is not stated, but as it is valued at 4500 drachmae per container we can be sure it was worth considerably more on a value per mina basis than the other goods. Thus it is possible that we might view this duty as a kind of ‘road use’ tax by which the arabarchs penalised most heavily those goods which were less valuable on a cost-per-weight basis: the tolls may have been intended to defray the cost of the maintenance of the roads and hydreumata along the route, and so the goods which took more room in the caravans (and presumably caused more wear and tear on the roads) for less eventual return to the government when the 25% tax was imposed were taxed the most heavily at the port of arrival.

This possible explanation for the levy could be strengthened by another toll levied on users of the Eastern Desert roads by the arabarch, the Coptos tariff. As has already been shown, the arabarch under the instructions of the praefectus montis

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221 See e.g. the Coptos tariff (OGIS 674). See also OGIS 685, which mentions Claudius Geminus who was both arabarch and epistrategos of the Thebaid, and OGIS 202 concerning Apollonios the son of the arabarch Ptolemaios. In addition, Juvenal Satire 1. 130 refers to an Aegyptius Arabarches.

228 P. Vindob. G 40822 verso, col. 2, 1-3; 10; 14; 20-25
Berenicidae levied charges for an apostolion, or pass, for individuals using the road. Unlike the tax levied at the ports, these taxes were levied upon persons and beasts of burden using the road; the Coptos tariff is clearly not the same tax as that mentioned in the Vienna papyrus. Nonetheless, it is to do with the use of the roads in this region and may therefore be related in some way to the duty levied at the Red Sea ports.

Again, the occupation of the arabarch seems once again to be primarily associated with the collection of various taxes and levies. The Coptos tariff states that in the first century the arabarch was under the direct supervision of the praefectus montis Berenicidae, who was himself directly responsible to the Prefect of Egypt. Thus, it appears that we can reconstruct something of the administrative structure of the special military area of the Egyptian Eastern Desert in the first century A.D. The area was under the military and civil control of the praefectus montis Berenicidae, who was directly responsible to the prefect in Alexandria. Under him, the arabarch was responsible for the collection of taxes in the area, especially those to do with merchants and the use of the roads to the Red Sea; while the quarries in the Eastern Desert were under a procurator who was also responsible to the praefectus montis Berenicidae. No doubt the other officers of the region, such as the commanders of the various military garrisons, also took their orders from the praefectus montis Berenicidae. This unusual administrative structure was probably imposed upon the Eastern Desert region due to its unusual nature: sparsely occupied

227 II. 2 above.
228 J. Lesquier L'armée romaine d'Égypte d'Auguste à Dioclétien (Cairo 1918), 421-427.
229 R. Cavenaile "Prosopographie de l'armée romaine d'Égypte", 220, 227, 236, 239, 269, 286, 301.
but the source of two important sources of imperial income, the quarries and the eastern trade. Thus, the whole area was put under the civil and military command of an equestrian prefect, the praefectus montis Berenicidae, with various officials, including the arabarch, subordinate to him.

The office of arabarch is very possibly identical to the post of alabarch which is mentioned by Josephus as having been held by Alexander, brother of Philo and father of Tiberius Julius Alexander and Marcus Julius Alexander. Several scholars have come to the conclusion that the offices were in fact the same, and referred to an officer in charge of revenues in the Eastern Desert. This is strengthened by the probability that the Aegyptius Arabarches referred to by Juvenal was most likely a disparaging reference to Tiberius Julius Alexander, and the triumphal statues to which Juvenal refers were to commemorate Alexander’s participation in the crushing of the Jewish revolt in A.D. 70. Thus, even though Josephus does not actually state that Tiberius himself was alabarch, the family relationship combined with the similarity of the terms would seem to imply strongly that the terms alabarch and arabarch in fact refer to the same office.

One objection which might be raised to this, however, is that the references in Josephus all seem to refer to someone resident in Alexandria rather than in the Eastern Desert and subordinate to the praefectus montis Berenicidae. One possible explanation for this is that the officials who removed the taxes in the Red Sea ports

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231 Josephus AJ XVIII. 159, 259; XIX. 276; XX. 100. For another Jew, Demetrius, as alabarch see Josephus AJ XX. 147.
were functionaries who simply acted upon the orders of the *arabarch* in distant Alexandria. Another possibility is that there were several people holding this post at one time, as indeed would seem to be implied in the Vienna papyrus’ use of the plural ὑπὸ τῶν Ἀραβαρχῶν to describe the office. Thus, one individual could have been *arabarch* in Alexandria, and responsible for some sources of revenue there (perhaps to do with the Red Sea commerce), while another could have been *arabarch* in the prefecture of Berenike, and responsible for the collection of revenue in that area.

There also appears to have been another official who was involved with the collection of customs duties in the Red Sea ports. An inscription from the early Augustan or possibly the late Ptolemaic period\(^\text{235}\) from the Nubian temple of Dakka mentions someone holding the office of *paralemptes* of the Erythraean Sea, which appears to have been a different office to that of *arabarch*:

\[
\begin{align*}
\text{[Ἀπολ]λώνιος Πτολεμαίος} & \text{ Ἀραβάρχων}
\end{align*}
\]

Apollonios, son of the *arabarch* Ptolemaios, *strategos* of Ombeitos and the region around Elephantine and Philae, and *paralemptes* of the Red Sea \(^\text{236}\).

Thus it would appear that this individual, the son of an *arabarch*, held the post of customs-collector on the Red Sea. While it is clear that the office is different to that of *arabarch*, the relationship between the two posts is unclear. It is possible that the position of *paralemptes* involved the collection of dues from merchants who had travelled across the Eastern Desert from the Red Sea into the region of Elephantine.

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\(^{235}\) The date is not certain but must date from no later than Augustus’ time.

\(^{236}\) *OGIS* 202. See O. Hirschfeld *Die kaiserlichen Verwaltungsbeamten bis auf Diocletian* (Berlin 1905), 82.
and Philae (modern Aswan). As has been noted earlier, the routes across the Eastern Desert do not appear to have been concentrated upon Coptos until the reign of Tiberius,\textsuperscript{237} so it is possible that in these early years there was a customs-collector based at Syene who collected \textit{portoria} in that region which were different to those collected by the \textit{arabarch} for use of the Eastern Desert roads.

As we have already noted in the earlier discussion on the Red Sea trade in Egypt, the eastern merchandise reaching Coptos was impounded in a public customs-house there until the relevant dues were paid, as the Vienna papyrus revealed. It is possible that these taxes were the same as those collected by the \textit{paralemptes} of the Red Sea in Syene in an earlier period, although the papyrus reveals nothing of the nature of these taxes or the amount that was exacted. Nonetheless, given the fact that taxes had already been paid to the \textit{arabarch} at the Red Sea port of arrival (as is shown on the verso of the papyrus and discussed above), it would seem most likely that the taxes paid in Coptos were to a different authority; this authority might have been the \textit{paralemptes} of the Red Sea. Alternatively, of course, since the only attestation we have for this post dates from the earliest period of Roman occupation, or perhaps even earlier, the position of \textit{paralemptes} may have been abolished by the time of \textit{P.Vindob. G} 40822. This certainly would explain the failure of the Vienna papyrus to mention this official, but again we cannot be sure. Regrettably, it would seem that the administrative structure of the Egyptian Eastern Desert in the early imperial period must remain unclear.

\textsuperscript{237} See II. 2 above.
As has already been discussed in the subsection on Alexandria, the final and major tax exaction on a shipment of eastern goods passing through Egypt was the 25% \( \tau \eta \tau \alpha \rho \tau \eta \) which was paid in Alexandria. Unlike the previous lesser levies which were exacted on the Red Sea and in Coptos, and which appear to have been paid directly to a government official, the collection of the \( \tau \eta \tau \alpha \rho \tau \eta \) appears to have been farmed out to publicans. In Pliny's reference to the freedman of Annius Plocamus, to which reference has already been made on other occasions, he states that Annius Plocamus \( \textit{Maris Rubri uectigal a fisco redemerat}. \)²³⁸ Given the fact that the other taxes we have examined were paid directly to government officials, it would seem likely that the \( \textit{uectigal} \) farmed by Annius Plocamus was the \( \tau \eta \tau \alpha \rho \tau \eta \). Of course, the tax farmed by Annius Plocamus could have been yet another levy imposed by the Romans of which we have no other knowledge, in which case we would have to admit that our knowledge of the collection of the \( \tau \eta \tau \alpha \rho \tau \eta \) is very thin indeed. An inscription from Palmyra which refers to the collection of the \( \tau \eta \tau \alpha \rho \tau \eta \) in Syria refers to a councillor of Antioch as the \( \tau \eta \tau \alpha \tau \rho \tau \omega \nu \eta \eta \), although it gives no details of whether he was a government official collecting the tax directly or a tax-farmer.²³⁹ The \textit{Periplus} mentions a collector of the \( \tau \eta \tau \alpha \rho \tau \eta \) at the Nabataean port of Leuke Kome, calling him a \( \pi \alpha \rho \alpha \lambda \iota \pi \iota \tau \tau \eta \tau \zeta \ \tau \zeta \ \tau \eta \tau \alpha \rho \tau \eta \).²⁴⁰ The use of the term \textit{paralemptes} might indicate that this person was a government official, but this is not certain. In any case, the situation at Leuke Kome was probably exceptional²⁴¹ and thus cannot be regarded as a

²³⁸ Pliny \textit{NH} VI. 24
²³⁹ Inv. X. 29
²⁴⁰ \textit{Periplus} 19
²⁴¹ G.K. Young "The Customs-collector at the Nabataean Port of Leuke Kome (\textit{Periplus Maris Erythraei} 19)" \textit{ZPE} 119 (1997), 266-268 and III. 1 below.
pattern for the collection of the τετάρτη at Alexandria. In summary, the evidence we have regarding the system used to collect the τετάρτη is inconclusive.

Regardless, it is abundantly clear that the Roman government collected significant tolls from any eastern luxury merchandise passing through Egypt. With this fact in mind, then, it will be instructive to also take careful note of the provision of military protection in the Eastern Desert for the caravans which carried the goods. That Roman soldiers were there is beyond doubt, but what exactly was it that they were doing in the Eastern Desert?

Protection of Caravans in the Eastern Desert

The fact that Roman troops were present in the Eastern Desert of Egypt in order to (presumably) offer protection to caravans traversing this territory has already been well established, but the exact means by which this protection was offered is open to discussion. In order to attempt to understand the role which was played by the Roman troops in the Eastern Desert it will be necessary to examine both the forts and the watchtowers along the roads of the area, as well as bear in mind the significant tax revenue which the Roman government seems to have gained from the merchants.

As has been noted, the routes between the Red Sea ports and the Nile valley are equipped with forts, called hydreumata, which are distributed at fairly regular intervals along the roads. The features which these hydreumata typically exhibit are fairly uniform, including a substantial walled enclosure capable of housing troops and offering protection to passing travellers, and enclosing a well, whence the name hydreuma. Control of a string of fortified wells such as these along a route such as the
ones in the Eastern Desert would effectively give control of that route, as well as the ability to offer effective protection and revictualling to anyone who was using the route.

Particularly informative is the siting of these fortifications. Almost without exception, the *hydreumata* are sited on the valley floor on the direct line of the road even when more defensible high ground is available. They are thus clearly not intended primarily as defensive installations, but are rather concerned with protecting and controlling the route. These forts are clearly not designed to suppress desert tribes or any such general security measure, but are solely intended to house soldiers who were concerned with controlling the desert roads.

Further indication of the forts' role is given by the distribution of the installations. The stations are spaced approximately one day's journey apart on the Coptos - Berenike road and closer, about one-half day's journey, on the road from Coptos to Quseir. This spacing of approximately one day's journey apart or closer (but not close enough for a defensive line) is also indicative of the forts' function: caravans using the road could travel between the stations during the day, and enter the protection of a *hydreuma* when night fell and the caravan was more vulnerable to brigandage. It would thus seem clear that the chief reason for the existence of the *hydreumata* was to offer protection and shelter to the traffic, prominent among which would have been the spice and incense caravans, which was using the roads.

This role of the Roman military in the Eastern Desert is also indicated by the watchtowers, even though the purpose of these towers is rather more ambiguous than

243 Ibid., 169-171.
that of the *hydræmata*. The most significant collection of these watchtowers is found along the road from Coptos to Quseir, although examples are found on other routes also. The towers on the Quseir - Nile road number approximately 65 and are found both close to the route and high in the hills surrounding it. The towers are much more common in the more mountainous eastern region of the route, where sighting and signalling distances are much shorter. In the flatter, more open territory closer to the Nile, there was clearly less need for whatever function it was that the towers filled.

Zitterkopf and Sidebotham established that the towers were intervisible and that their intervisibility existed independently of the *hydræmata*. It would thus be possible to signal from one end of the route to the other simply by waving a flag or flashing a polished shield from each tower in succession, with no need for any signalling from any of the forts. From this they concluded that the towers were primarily signal stations designed for signalling up and down the road. They rejected the idea that these towers were watchtowers designed for maintaining the security of the route, citing the intervisibility of the towers and the presence of some towers on the wadi floor, where they would presumably have been of little use in supervising the route and the approaches to it.\(^{244}\)

\(^{244}\) Ibid., 182-188. Not all the towers are actually intervisible, but enough of them are to indicate that the remaining gaps were probably filled by towers which are no longer extant.
Illustration II. 1: A *hydreuma* on the Coptos - Quseir road. Photograph from S.E. Sidebotham *Roman Economic Policy in the Erythra Thalassa*.

Illustration II. 2: A watchtower on the Coptos - Quseir road, placed on high ground within sight of the route. Photograph from S.E. Sidebotham *Roman Economic Policy in the Erythra Thalassa*.
However, while it would certainly seem clear that the towers were used for signalling along the route, their use as watchtowers cannot be so readily dismissed. There still remains the possibility that the towers existed for a dual purpose: that is, they could have been used for both security and signalling purposes. This is perhaps indicated by the presence of watchtowers in other parts of Egypt, such as the Nile valley, which were not directly associated with the caravan trade: these seem to have been used for security functions, and so it is likely that the towers in the Eastern Desert had a similar role.

The security role which these towers had in addition to their clear signalling function is also indicated by the system which was used to man the towers. Several groups of ostraka and other inscriptions have survived which appear to be a roster system for the manning of the towers. These documents give the names (or numbers) of pairs of guards which alternated daily with another pair. On their day of duty, one guard of the pair is listed as ēw and the other as ḫr. While it has been suggested that these terms refer to patrols ‘up’ and ‘down’ the road, this is unlikely as it would mean that there would have been one-man patrols travelling up and down the roads in the middle of the desert, which would seem a rather dangerous and unusual practice. On the whole, Bagnall’s suggestion that the terms refer to pairs of guards on the watchtowers, one on top of the tower and the other in the wadi on the road, seems by far the most logical.

245 R. Alston Soldier and Society in Ancient Egypt (London 1995), 82-83.
246 O. Amst 8-14; R.S. Bagnall & J.A. Sheridan “Greek and Latin Documents from Abu Sha’ar”, 166-167.
249 R.S. Bagnall “Upper and Lower Guard Posts” CE 57 (1982), 125-128.
This rostering system has, as already noted, implications for the purpose of the towers. If the towers were used exclusively for signalling along the route, as Zitterkopf and Sidebotham suggest, it is difficult to imagine what role the guard rostered as κάτω could have played, as a linear signal route would have only required one signalman, who would remain in the tower awaiting signals. However, as Bagnall notes, the two-guard system would allow the tower guard to sight approaching bandits or some other trouble and signal to the 'down' guard in the valley to investigate. In addition, he could signal along the line of towers to get additional help from the nearest hydreuma if that were necessary.

Thus it would seem most likely that the towers were used for a variety of purposes, including linear signalling along the route, signalling from tower to wadi floor (or vice versa) in the event of security problems, and perhaps for summoning the garrison from one of the hydreumata in the event of a more serious security problem. The towers could be, and no doubt were, used for a variety of such purposes, and it would be a mistake to believe that they had only the one function. In any case, the towers, like the hydreumata, are clear indication of the money and effort expended by the Roman authorities in protecting and controlling the valuable traffic along the roads of Egypt’s Eastern Desert.

The Need for a Security System in the Eastern Desert

It is then abundantly clear that there was a fairly complex and sizable system of security provided by the Roman authorities to protect and control the caravans

250 Ibid., 126.
travelling between the Red Sea and the Nile. For such an expenditure to have been necessary, whatever the motivation, there must have been a security problem of some sort which would threaten the caravans and require this level of protection. It is therefore proposed to examine the possible sources of such threats and the extent to which they might have posed a danger to the caravan trade.

Certainly the nomads who lived in the Eastern Desert would have presented a problem to traffic passing through this area in Roman times, as indeed they had in Ptolemaic times. There were various peoples who inhabited these regions, generally grouped by the Romans under the broad heading of "Trogodytes", and there is some evidence that these peoples raided traffic using the Eastern Desert roads from time to time. Several votive offerings from the temple of Pan at el-Kanais on the Berenike-Edfu road dating from the Ptolemaic era give thanks for the dedicator being "saved from the Trogodytes"\textsuperscript{251}, indicating that these nomadic inhabitants could offer a threat to traffic traversing the road. No doubt the rich caravans carrying such high value but portable items such as silks, spices and gems from the mines in the Eastern Desert would have provided a tempting target to nomads living in this area, and it may be that, in the early period at least, these nomads were the primary threat against which the security measures in the Eastern Desert were built. Nomadic problems, however, were not confined to the earlier period. Indeed, it would seem that it was in the later period that the most severe problem with a nomadic group appeared, for in the later third century a serious problem arose with a group called the Blemmyes, who appear

\textsuperscript{251} i.Kanais  3, 8, 13, 18, 43, 47, 62, 82, 90.
to have been involved in raiding caravans to the extent that they severely curtailed the trade by the reign of Diocletian. 252

However, such rich targets as the spice caravans would prove tempting for others besides the desert nomads such as the Trogodytes and the Blemmyes. As will be discussed later in this chapter, there is considerable papyrological evidence to indicate that after the second century A.D. in particular there was a considerable banditry problem within Egypt, derived chiefly from displaced villagers who fled their lands to avoid crippling tax burdens. 253 In order to combat this problem, a large and complex security system seems to have been put in place. By this system Egyptian villagers seem to have been grouped into small bands of about nine men under the leadership of an officer called a dekanos, and then used for various policing duties including acting as guards in the watchtowers. 254 Many of the names of the guards on the watchtower guard rosters mentioned above are Egyptian, indicating that the system of dekanoi was used in the Eastern Desert, and that villagers could be drafted for duty on the watchtowers in this region. However, the system of watchtowers is not only confined to the Eastern Desert but is also attested in papyrological evidence within the Nile valley, even though no physical remains have survived. 255 It would thus seem clear that whatever security problem prompted the construction of these watchtowers was more widespread than just along the routes in the desert but rather spread throughout Egypt, although of course the valuable cargoes traversing the desert roads would have been especially in need of protection.

252 See II. 6 below.
253 R. Alston Soldier and Society in Ancient Egypt, 84. See II. 6 below.
255 P. Fay 38, 108.
That this security situation was occasioned by a substantial rise in the level of banditry in the later second century, which itself was caused by a more severe tax regime, is well attested in the papyrological evidence, as well as other documentary evidence. Egypt was, by the second century, renowned for the high level of bandit activity which it endured, and this is reflected in the documentary evidence. There is considerable evidence of displacement and rebellion in the villages of Egypt, especially after A.D. 160 or so, which leads to a very rapid decline in population in many villages of Egypt during this period. Several papyri from this time refer to people leaving the land to evade taxes and taking up a life of banditry.

In these circumstances we can see that the Romans would have an interest in the suppression of banditry beside their well-attested interest in general law and order. As has been noted, many papyri refer to depopulation of villages, indicating that many people had left their farms to become bandits. Allowing this to continue would not only adversely affect law and order, it would also adversely affect the tax income gathered by the Roman officials due to the reduced number of people actually working the land and paying taxes. This then no doubt explains at least in part the interest the Romans had in protecting the caravans travelling from the Red Sea to the Nile valley: if these were not protected they would provide an extremely tempting and vulnerable target for bandits, and it is conceivable that the richness of the pickings might encourage more people to a life of banditry rather than one of obediently paying taxes to Rome. That these caravans were indeed an attraction to bandits is

256 R. Alston Soldier and Society in Ancient Egypt, 83.
258 See e.g. BGU I. 372; P.Oxy XII 1408; XLVII 3364, for which see J.D. Thomas “A Petition to the Prefect of Egypt and Related Imperial Edicts” JEA 61 (1975), 201-221.
demonstrated by the Greek novelist Xenophon of Ephesus, who describes a bandit who settles in Egypt in order to live off the trade from India. Obviously the spice and silk trade could provide a thief with a rich living, so the Romans were forced to make greater provision for the protection of this trade as tax-evasion, banditry and lawlessness increased in the later second and third centuries.

Thus in our examination of the possible threats to the caravan traffic in the Eastern Desert we can distinguish two broad areas: first, the nomads who lived in the Eastern Desert region, and secondly the bandits who were displaced from their normal positions in Egyptian society by intolerable tax burdens and took up a life of brigandage instead. The former problem would have been generally confined to the Eastern Desert, while the second was a more widespread problem throughout Egypt. Even in the context of such a widespread problem, however, the caravans would have required especially diligent care, both for the value of the cargoes and the tax revenue they would bring to the government, as well as the temptation they would have provided for the Egyptian farmer to turn to a life of brigandage had they been left unguarded. Generally speaking, the problem with brigandage appears to have been more significant after the second century, although the problem with nomads never fully disappeared, as is evidenced by the rise of the Blemmyes in the later period.

Thus we can clearly see that the Roman government was heavily involved in the Egyptian Red Sea trade, both from the perspective of collecting taxation and customs, and from the point of view of protecting the caravans militarily. The motive for the collection of dues is reasonably easy to determine: obviously the Romans

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259 Xenophon of Ephesus 4
wanted to collect the maximum revenue possible from the trade, and, in the case of the Coptos tariff at least, partially defray the costs of maintaining the military garrisons in the Eastern Desert which protected the caravan traffic. The motive for the military garrisons, however, is more difficult to determine: was it a matter of deliberate promotion of the trade for the economic well-being of the Empire, or simply a more pragmatic and immediate desire to collect customs dues?

Was There a Roman 'Trade Policy' in Egypt?

It is quite clear from the foregoing discussions that not only was there a considerable trade in eastern luxury goods passing through Roman Egypt, but that the Roman authorities were willing to expend considerable effort and money in order to provide both facilities and protection for this trade. In the view of many scholars, this fact has been interpreted as evidence that the Romans were deliberately encouraging the trade in Egypt, and at the same time actively discouraging the trade which had passed through such places as Petra in the Nabataean Kingdom with the intent of weakening those places. While the question of whether or not the Romans were deliberately attempting to weaken the Nabataean kingdom by the redirection of its trade will be explored in the following chapter on Arabia, it is now proposed to examine whether or not the construction of facilities and the military garrisoning of the Eastern Desert can be construed as deliberate promotion of the Egyptian trade.

It is certainly the case that the construction of these military facilities and the provision of armed protection to the caravans would have helped and encouraged the trade a great deal, but this is not the same as saying that the Romans deliberately
promoted the trade. As was discussed earlier, Sidebotham argues that the provision of these facilities is proof of an imperial economic policy aimed at encouraging the trade, growing from imperial involvement in financing the traffic. However, it has already been demonstrated that much of the evidence adduced to prove imperial involvement in the Red Sea commerce is fairly insubstantial: we should thus confine ourselves to the actual evidence for imperial encouragement of the trade. Such evidence, in fact, consists solely of the physical evidence of the facilities constructed in the Eastern Desert. These facilities, however, are capable of other explanation. These alternatives demonstrate clearly that it is not necessary to posit a proactive Roman trade policy in order to explain the presence of the roads and forts in the Eastern Desert of Egypt. For one thing, these roads also serviced the quarries and mines in this region, most of which were state-owned, so this can be adduced as a reason for imperial interest in this area. Another reason is the fact that the state collected a 25% import duty on all the goods of the Red Sea trade, as well as extracting various tax duties and road tolls from the merchants at various other points. Thus, even though the trade itself appears to have been in the hands of private merchants, this tax revenue must have provided a considerable income for the state.

The existence of this substantial tax income accruing to the state as long as the trade continued to flourish would seem to provide the real answer to the questions posed by the presence of military installations in the Eastern Desert. The value of this tax revenue, and the likely steps that the government would take to protect such revenue, mean that the mere existence of these facilities provided by the government is

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insufficient to prove that there was a policy of deliberate encouragement of the Red Sea trade. We must think carefully about whether the government was proactive in their provision of protection and facilities for the trade, or whether it was simply reactive. In other words, can we really say that the Romans constructed these facilities in order to promote and encourage the trade, or did they simply provide them to protect an already extant trade in order to ensure the continuation of the lucrative customs revenues?

When the history of the trade is examined, an active Roman interest in the promotion of the commerce is not apparent. We have already seen in the Introduction that the trade experienced a dramatic leap in volume almost immediately upon the Roman takeover of Egypt and the establishment of the Pax Romana in the Mediterranean. For example, Strabo records a great upsurge in the volume of the trade immediately after the Roman annexation \(^{262}\) (and thus before the construction of the majority of the facilities), while at the same time there was a vastly increased demand for the goods in the markets of Rome. It would seem clear from these facts that the growth occurred in the trade because of natural market forces, and not because of deliberate government policy. We cannot, and should not, regard government intervention as the reason for the vitality of the Red Sea commerce in the first century, as this vitality clearly would have existed regardless of the construction of facilities or the lack of them.

We should rather look on the Roman construction works in the Eastern Desert as an investment in protecting sources of imperial income in that area, which included

\(^{262}\) Strabo Geog. II. 5. 12
both the wealth excavated from the ground in the region as well as the lucrative tax revenues to be gained from the trade in overseas luxury goods. The Roman government’s involvement in this trade should be seen as strictly reactive: a substantial source of income existed in the customs revenue extracted from the merchants, and it was deemed wise to construct facilities in order to both protect and monitor this source of income. This, then, is the sole demonstrable extent of the Roman ‘encouragement’ of the Egyptian Red Sea trade.

This view would also explain the desire to control and monitor the trade which seems to lie behind the issuing of passes for those travelling to the Red Sea ports (as seen in the Coptos tariff), as well as the concentration of all the routes from the Red Sea to converge upon one Nile port, Coptos. By monitoring the traffic and keeping a close eye upon it the Romans not only protected the caravan traffic (and therefore the customs revenue which came from it), but also prevented the merchants from leaving the approved route and trying to sell their wares before the correct taxes had been paid. P.Vindob. G 40822, as has already been discussed, mentions public customs-houses at Coptos and Alexandria in which the goods were impounded under the seal of their owner until the appropriate taxes were paid. Thus, whether the main purpose of the military installations was in fact protection of the merchants or monitoring them, or indeed both, it is apparent that the only ‘trade policy’ enacted by the Romans was to gain as much revenue as possible from the Red Sea commerce.

263 As appears to have been deliberately done in the reign of Tiberius. See II. 2 above.
Conclusion

The primary motivation for the construction of military facilities designed to protect the caravan traffic in the Eastern Desert must have been the extensive tax revenues which accrued to the state as a result of the trade, not any desire to actively promote the Red Sea commerce. As will be demonstrated below, these tax revenues were considerable, and the protection of this important income is more than enough to account for the Roman interest in guarding the caravans. While it has been suggested that there was some direct imperial involvement in the trade which caused the Roman authorities to promote it, in reality there is no need to posit any cause for their interest other than the tax revenue which they stood to gain from the continuation of the traffic. The extensive military presence in the Eastern Desert is evidence that the Romans were very interested in this tax revenue, and thus we may expect to find similar interest in the protection of spice, silk and incense traffic in other places in which it was found, such as Arabia and Syria.

The point which must be emphasised in this regard is the essential reactivity of the Roman government's involvement in the trade. As other aspects of the international trade in the Roman East are studied, this principle will be noted again and again. In the Egyptian trade, and as will be seen in other areas of Rome's eastern commerce, there is no trace of a deliberate Roman policy designed to encourage (or for that matter discourage) the commerce or to influence its conduct in any way. In this case as in others, the sole official Roman interest in the trade was to milk it for all it

264 VI. 2 below.
was worth, and to provide sufficient protection to ensure that this tax revenue continued to flow.

II.5 Egyptian Trade in the Antonine Period

The prosperity of the Egyptian Red Sea trade appears to have continued well past the initial period of development in the first century A.D., for there is some evidence to show that the trade continued to prosper during the second century A.D. as well. Although the quantity of evidence is not as great as in the preceding century, there is nonetheless enough to allow us to conclude that the Egyptian Red Sea trade continued to operate. Indeed, given the way in which the trade expanded as a result of the establishment of peace in the Mediterranean in the first century, it would be surprising if the pre-eminent peace and prosperity of the Antonine period had not brought similar prosperity to the eastern luxury trade.

There is, in addition to the evidence for the continuation of the trade along the lines used in the first century A.D., some evidence which seems to indicate important initiatives to encourage trade in Egypt in the second century. If this is the case, this should be seen as a significant departure in the Roman attitude toward the commerce. As has already been shown, the Romans generally did not act to guide, promote or encourage the trade, instead confining their investment to the provision of port facilities and of military supervision and protection to ensure that the commerce continued to provide a source of revenue for the Roman government. The actual development of new lines of trade is unprecedented, and if this were to be the case then we should identify a major change of Roman policy toward the Red Sea trade.
Before we examine these new developments, however, we will first examine the continued importance of the trade routes used in the first century.

*Red Sea Commerce in the Second Century*

Despite the new initiatives, which will be discussed shortly, the majority of the Egyptian Red Sea trade appears to have continued to use the routes and ports already described with respect to the first century, that is, the ports of Berenike and Myos Hormos and the roads from them to Coptos and thence via the Nile to Alexandria. Graffiti from the reign of Hadrian have been found on the road from Coptos to Quseir al-Qadim,\(^\text{265}\) showing that this road was in use at this period. In addition, archaeological work at the ports of the Red Sea show that these ports were in use at that time also, although there is some indication that the port of Berenike may have declined to some extent in this period.\(^\text{266}\) It nonetheless appears that the conduct of the Red Sea commerce in the second century A.D. continued along the lines which had been established in the previous century, and continued to be of some significance and importance. This would certainly seem to be indicated by the greater predominance, and in many cases greater accuracy, of contemporary literary references to India from this time. The *Geography* of Claudius Ptolemy in particular displays a great deal of accurate information on India compared to earlier periods, while less scientific but nonetheless significant allusions to India and places further

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\(^{265}\) *I. Kaptos* 4, 5 and possibly also 54 & 55.

\(^{266}\) S.E. Sidebotham "The Excavations", 94. Very few coins were found from this period at Berenike, but pottery evidence indicates that the port was still active in the second century.
afield abound in the literature of the period. In one example, Dio Chrysostom commented about the vigour of the Red Sea trade in his description of Alexandria during Trajan's reign, showing that the trade was in good health in his time. Aristides also, writing in the same period, makes similar comments. Whether or not these literary allusions mean that the Egyptian trade peaked at this time as compared to the Julio-Claudian and Flavian periods, we are certainly justified in stating that it most probably in no way declined. Nonetheless, given the other evidence mentioned we may legitimately conclude that the commerce as described earlier in this chapter continued to pass through Egypt in the second century in much the same way as it had done in the first, and the trade and the revenues derived from it appear to have continued to be a concern of the imperial government.

One important difference which took place during this period, however, is in the way in which the region of the Eastern Desert was administered. In the first century the Eastern Desert region appears to have been a military area under the command of the praefectus montis Berenicidae, who was directly responsible to the prefect of Egypt. This special status seems to have been derived from Roman concern about the valuable sources of imperial income in this area, both from the taxes levied on the eastern commerce and the products of the mines and quarries in the region.

In the second century, however, this situation appears to have changed and the Eastern Desert seems to have been brought under the normal civilian administration

267 Ibid., 141-147. Interest in and knowledge of the East is shown throughout Arrian’s works (Indica, Parthica, Anabasis Alexandri); in many allusions in Lucian’s works (see S.E. Sidebotham Roman Economic Policy in the Erythra Thalassa, 142 for a listing of these); and also by Juvenal (Satires VI. 337, 466, 585; X. 1; XI. 123-126; XV. 163).
268 Dio Chrysostom XXXII. 36
269 Aristides Or. XIV. 321
270 See II. 4 above.
found in the rest of Egypt. *P.Hamburg* 7 of A.D. 132 states that the *arabarch*, who in the first century had been under the command of the *praefectus montis Berenicidae*, now took his orders from the civilian *epistrategos* of the Thebaid. Thus, it would appear that at some time prior to this the Red Sea coast was made part of the normal administration of Egypt, and the previous special status of the region was revoked. At this time too, presumably, the office of the *praefectus montis Berenicidae* was abolished.

As well as this administrative change, which may have been brought about by a reduced concern about the security of the Eastern Desert, it would seem that there was also an expansion in the number of routes available to the merchants of the eastern trade. As has already been mentioned, there were significant developments in the Red Sea commerce which were made during this time, and it is possible that these, regardless of their apparently limited success, were intended to promote the eastern trade.

*Trajan's Canal from the Nile to the Red Sea*

The first of these initiatives was the construction of a canal along the Wadi Tumilat between the eastern branch of the Nile delta and the head of the gulf of Suez at Clysma. This canal had been constructed much earlier, and had subsequently been rebuilt on several occasions. Earlier work on a canal at or near this site was undertaken by Necho, Darius I and Ptolemy II Philadelphus, and was recorded by several

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historians of the classical period.\footnote{Herodotus II. 158-9; IV. 39, 42; Diodorus Siculus I. 33. 7-12; Strabo \textit{Geog.} XVII. 1. 25-26; Pliny \textit{NH} VI. 33; Ptolemy \textit{Geog.} IV. 5}

It would appear that Trajan decided to rebuild and re-open the canal of Ptolemy II which had long since silted up.\footnote{Plutarch \textit{Antony} 69: Cleopatra intended to get her galleys to the Red Sea by having them dragged: clearly the canal was not serviceable at that time.} The construction of this canal and its attribution to Trajan are recorded by Ptolemy, who mentions the construction of the \textit{Amnis Traianus} at this site, passing from the Nile at Babylon near modern Cairo to the Red Sea at Clyisma.\footnote{Ptolemy \textit{Geog.} IV. 5. For Trajan’s canal see P.J. Sijpesteijn “Der \textit{ΠΟΤΑΜΟΣ ΤΡΑΙΑΝΟΣ}” \textit{Aegyptus} 43 (1963), 70-83; P.J. Sijpesteijn “Trajan and Egypt” \textit{Papyrologica Lugduno-Batava Papyri Selectae} 13 (1965), 106-113.} The course of this canal is still visible in some places, and it has been surveyed.\footnote{C.A. Redmount “Wadi Tumilat Survey”\textit{NARCE} 133 (1986), 20.}

Although the exact purpose of these canals is not explicitly stated, the connection of the Nile valley to the Red Sea would seem to be very convenient for the Red Sea trade, as it would obviate the need for the goods to be transported over the desert between the Red Sea ports and the Nile. Indeed, in approximately A.D. 170 Lucian refers to the connection of Clyisma to the Nile and its use as a port to reach India:

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\text{αναπλέως ὁ νεανικὸς εἰς Αἴγυπτον ἀχρι τοῦ Κλύσματος, πλοῖον ἀναγομένου ἐπείσθη καὶ αὐτὸς εἰς Ἰνδίαν πλέοισαι}
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When the young man had sailed into Egypt as far as Clyisma, and a ship was then departing, he was persuaded to sail to India.\footnote{Lucian \textit{Alexander the False Prophet} 44}

Since the young man in question had sailed from Alexandria, it was clearly possible to sail from there to Clyisma, which could only have been achieved by means of the canal.\footnote{Alexandria was considered to be ‘next to’, not ‘in’ Egypt. Thus, in leaving Alexandria, Lucian describes the young man as sailing \textit{ἐἰς Αἴγυπτον}, that is, “into Egypt”.} In addition, this citation testifies to the use of Clyisma as a port involved in the Red Sea trade with India. It is thus clear that the canal was used in connection
with the Red Sea trade, and it appears to have been used for this purpose fairly consistently over the rest of the Classical period, as several papyri of the third century and later make reference to the canal. 278 Indeed, the greatly reduced costs of water transport in the ancient world when compared with land transport would presumably make it a very attractive alternative to the other Red Sea ports, which required the goods to be transported over the Eastern Desert.

It is a matter of some interest, then, that Clysma did not supplant Myos Hormos and Berenike entirely. As has already been noted, the use of these ports continued right throughout the second century and still further, despite the presumably greater cost of their use due to the need for land transport. The main reason, it would seem, for the continuation in use of these ports is that the prevailing wind in the northern Red Sea comes consistently from the north, making it very difficult for a sailing vessel to reach the tip of the Gulfs of Suez and 'Aqaba. 279 Thus, especially when these winds were blowing hard, it may well have been easier for ships to put in at Berenike or Myos Hormos than to continue north to reach Clysma. However, despite this, the evidence we have for the use of Clysma, as well as for the use of the Nabataean port at Leuke Kome on the opposite side of the Red Sea, 280 demonstrates that ships did make the journey to the northern end of the Red Sea.

Sidebotham suggests that Clysma may have been used for bulkier cargoes such as grain and textiles, which could have been exported from the Arsinoite nome in the

279 S.E. Sidebotham Roman Economic Policy in the Erythra Thalassa, 57; S.E. Sidebotham “Ports of the Red Sea and the Arabia-India Trade”, 16.
280 See III. 1 below.
Fayyum oasis where they were produced. These bulky goods would be far more suited to carriage by the canal than by the overland passage to the Red Sea ports, and so this may be the reason why both Clysma and the southern Red Sea ports continued in operation side-by-side. Bulkier cargoes, which could not easily be transported overland, would have used the canal, whereas the lighter and more expensive items of the Red Sea trade were more easily transported by land to or from Coptos, and due to their higher values could more easily absorb the cost of overland transport.

In any case, despite the evidence which we have for the use of the Wadi Tumilat canal in the second and third centuries, it seems that it did not prosper greatly. Archaeological investigations of the port of Clysma have revealed that it flourished mainly in the Ptolemaic period and then in the fourth century and later, with relatively little use apparent in between. Thus, it would seem that Clysma experienced only limited use in the second and third centuries. This situation appears to have continued until developments in the fourth century reduced the significance of Myos Hormos and Berenike and caused Clysma to flourish, as will be discussed in the next section. Nonetheless, the evidence we have already noted would seem to indicate that the canal, and thus presumably Clysma too, was used at least to some extent in the second century A.D.

As to whether Trajan intended the canal as an encouragement to the Red Sea trade, it is very difficult to say given the absence of any literary accounts of the construction of the canal. While it might initially be difficult to imagine what other use

281 S.E. Sidebotham "Ports of the Red Sea and the Arabia-India Trade", 17.  
282 B. Bruyère Fouilles de Clysma-Qolzoum (Suez), 90-96.
the canal might have had aside from its commercial function, it is still doubtful that we could with justification call it a deliberate attempt to foster the Red Sea trade. If the canal indeed was designed with a commercial motivation in mind, it is more likely to have been done as an act of euergetism by the emperor than as anything that could be dignified by the name of 'economic policy'. Also, it may be that the reconstruction of the canal was not considered a new development in the trade so much as the repair of an artery of trade from the Ptolemaic period. The canal was after all not a completely new initiative: given the existence of previous canals on the site it is quite likely that Trajan simply opened up a canal which was already in existence and merely needed dredging out and repairs. It is possible that we might consider the canal to be no more a deliberate encouragement to trade than we should similarly consider the repairs to the Coptos-Red Sea roads noted earlier in the reign of Tiberius. Thus, in this view the main reason for the construction of the canal would be to ensure that the commerce continued to flow freely and the taxes the merchants paid continued to fill the imperial treasuries. Nonetheless, the pioneering of a new route, even if it had been used previously, is a new development in the Roman attitude toward the trade.

One thing which may account for the need to rebuild the canal may have been an increase in bulky goods being exported from Roman Egypt to the east, which would have necessitated a more efficient means of transport than the desert roads which serviced Berenike and Myos Hormos. The quantity of heavier cargoes such as grain and textiles being exported from Egypt to India and Arabia may have increased in the Antonine period, whereas trade in the previous century may have been more in coin, which is of course much more easily transported. This could be indicated by the
fact that the issues of Roman denarii found in the coin hoards in India are almost exclusively Julio-Claudian.\textsuperscript{283} perhaps by the second century more trade was being carried on in kind rather than for cash, and so the volume of goods leaving Egypt increased. If this is the case, it could have provided a need for the construction of the canal so the bulky goods could be exported efficiently: the canal would then simply be a means of keeping the commerce flowing, and thus keeping the tax revenue coming in. No doubt ships using the canal paid for the privilege, and portoria were levied on all goods being transported.

One possibility, however, that probably should not be overlooked is that the canal may in fact have been built not for commercial reasons, but for military ones. Indeed, there is some reason to suppose that it, like the emperor’s other major constructions, was built with a military purpose in mind.\textsuperscript{284} It may have even been possible that Trajan was contemplating a circumnavigation of Arabia in emulation of Alexander the Great’s intention. If this were the case, a canal connecting the Red Sea to the Nile might have been of use in allowing the circumnavigating fleet to reach the Mediterranean. While there is of course no proof for this, it should be considered as a possible alternative explanation for the construction of the canal. If indeed the canal was built with the specific intention of assisting and encouraging the Red Sea commerce, then it is unprecedented in the Roman administration of Egypt. While the Romans had built ports and roads for the commerce before, these had been on routes which were already used by merchants, and were, as we have seen, aimed at

\textsuperscript{283} As has been discussed, the bulk of these Julio-Claudian coins would probably have been transported to India after Nero’s coinage reform of A.D. 64. Nonetheless, the supply of these coins would have soon dried up; there were probably few or none of them left by the Antonine period. See II. 1 above.
regulating, controlling and protecting the commerce in order to protect the imperial income which came from the taxes the merchants paid. The deliberate construction of a whole new route is, by contrast, an intervention of a different order, even if it is (as is most probable) aimed at the same ultimate goal of revenue collection. This fact itself advises caution before we assign the *Amnis Traianus* to a new category of proactive imperial encouragement of the trade.

*The Via Hadriana*

The canal of Trajan, however, was not the only work in Egypt in this period which may possibly have been designed to promote the Red Sea trade. In the following reign, the emperor Hadrian also appears to have taken action to promote this trade by the construction of a new road through the Eastern Desert, the *Via Hadriana*. This road is mentioned in an inscription from Antinöe commemorating its construction. After Hadrian’s titulature in the nominative, the inscription continues:

δδόν καὶ ἰήν Ἄδριανόν ἀπὸ Βερενίκης εἰς Ἀντινόου διὰ τῶν ἁφαλῶν καὶ ὑμαλῶν παρὰ τὴν Ἐρυθρὰν ὅλασσαν ἱδρυμασαὶ ἄφθονοις καὶ σταθμοῖς καὶ φρονίσει δι’ εἰλημμένην [ἀνέτειμεν]

(Hadrian) built the new Via Hadriana from Berenike to Antinöe, through safe and even places by the Red Sea, and equipped at intervals with plentiful wells, stations and guardposts

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284 For example, his bridge over the Danube for the Dacian campaign and his canal near Antioch to facilitate the movement of soldiers and supplies in Syria. See D. van Berchem “Le port de Séleucie de Piérie et l’infrastructure logistique des guerres parthiques” *BJb* 185 (1985), 47-87.

285 *OGIS* 701 = *IGRR* I, 1142
It would appear that this road was built to fulfil the same purpose as the roads from the Red Sea ports to the Nile: for the conveyance of the goods of the Red Sea commerce from Berenike and Myos Hormos over to the Nile Valley. The course of the road has never been fully surveyed, although parts of it are visible along the Red Sea coast. In addition, the road is currently being surveyed for the first time, a project which is expected to take five years and the results of which are awaited with interest. However, from what is known now, the approximate course of the road can be followed. It departs from the Nile city of Antinœe and heads straight to the Red Sea, reaching it well north of Myos Hormos, and then continues down the Red Sea coast, passing through all the ports of the eastern commerce until Berenike, the terminus of the road.286

Even more than Trajan’s canal, we might be justified in thinking that this road was a deliberate encouragement of the Red Sea commerce, as while Trajan’s canal was the reconstruction of an earlier route, the Via Hadriana appears to have had no antecedent. There is no possible military motive that can be detected: the terms of the inscription quoted above clearly indicate that the road was built to convey Red Sea traffic. Unlike the canal, however, there is no additional need such as the capacity to transport bulk cargoes which can be adduced to account for the construction of the Via Hadriana. As far as can be told, the new road simply duplicated the role already performed by the roads between Coptos and the Red Sea. Can this then be seen as an attempt to foster the growth of the Red Sea trade, or perhaps evidence of something a little more sophisticated than the simple desire to collect taxes?

286 S.E. Sidebotham Roman Economic Policy, 62.
The answer probably lies in the chosen Nile terminus of the road, Antinöe. This city was founded by Hadrian in A.D. 129 in the course of his visit to Egypt, at which time the road also was commenced. Although the city was founded to commemorate Hadrian's lover Antinous, who drowned in the Nile at this point, the foundation should be seen as a part of Hadrian's overall policy of founding urban centres, construction of various public works and other acts of euergetism throughout the Empire in general. Sidebotham suggests that the increased volume in traffic in the eastern trade in the second century might have caused the Romans to want a second Nile emporium to supplement Coptos, but this is hardly likely: however much the traffic may have increased, it would still surely not be enough to overload the existing roads! The probable answer lies in Hadrian's desire to give his new foundation a source of income and wealth. Having seen the prosperity which the Red Sea trade had brought to Coptos, it may be that Hadrian decided to attempt to divert some of the caravan traffic coming from the Red Sea to Antinöe by the new road. There is no need to see the Via Hadriana as an attempt to foster the Red Sea trade. Rather, it would seem more likely that it was an attempt to use the Red Sea trade to foster the growth of a newly founded Hellenistic city in Egypt.

In this way it can be seen that Hadrian did not depart from traditional Roman attitudes toward the Red Sea trade in the construction of his road. Far from being an attempt to foster the expansion of the Red Sea trade, it is simply another Roman exploitation of the wealth generated by the trade, although in this case to a slightly

different end. In so doing, of course, Hadrian’s action testifies to the wealth which could be gained from the exploitation of this trade. In the event, however, it would appear that this faith was misplaced. Although Antinoe seems to have prospered, it was not, apparently, because of the Red Sea trade. There is very little evidence of the use of the *Via Hadriana* in the succeeding years, although some may come to light in the current survey of the road. Nonetheless, it is clear that the *Via Hadriana* cannot be considered as clear evidence of a proactive Roman trade policy.

**Conclusion**

It would appear that in the second century A.D. the Egyptian Red Sea trade continued to prosper. In fact, it may even be the case that the trade was at its peak during this time, perhaps due to the prolonged peace and prosperity enjoyed by Rome during much of the Antonine period. For the most part, this trade continued to flow along the same routes that it did in the previous century, that is, from the Red Sea ports of Berenike and Myos Hormos to Coptos via the roads through the Egyptian Eastern Desert. This peaceful and ‘normalised’ situation may indeed be reflected in the change in the administrative status of the Eastern Desert region. Whereas in the previous century it had been a special military area under the command of the *praefectus montis Berenicidae*, it now became a part of the normal administrative structure of Egypt under the *epistrategos* of the Thebaid.

There were, however, two developments in the period which have been characterised as evidence of a new, proactive Roman attitude to the trade, the *Amnis*
Traianus and the Via Hadriana. Upon examination, however, it was discovered that there is no reason to make such a conclusion based on these two works. The canal may have been necessary to move bulk cargoes upon which the trade had begun to depend more, or it may even have been built as a military enterprise without any commercial purpose. Hadrian’s road, as we have seen, was built to provide a source of income to the new foundation of Antinòe. In neither case is there good cause for postulating a proactive Roman ‘economic policy’ aimed at encouraging and expanding the Red Sea trade. Rather, as ever, the Roman policy continued to be a reactive one of responding to needs, mainly with the objective of maximising the indirect tax income from the commerce.

II.6 Decline of the Trade in the Third Century

Despite the vigour of the Egyptian Red Sea trade in the second century, it appears to have suffered something of a downturn in the third century. In the early years of this century, however, it would seem that the trade was still very active. From the Severan period especially there is strong evidence that the trade was vigorous and profitable. Much of the evidence that comes from the end of the second century and the beginning of the third interestingly mentions the previously unattested activity of Palmyrenes, both traders and soldiers, in the Red Sea commerce. Before examining the downturn of the trade in the later third century, therefore, it is proposed to examine the evidence for the trade in the Severan period, especially that which refers to the activities of Palmyrenes.
Palmyrene Participation in the Red Sea Commerce and Trade in the Severan Period

The merchants of Palmyra, as will be discussed further on in this work, were especially active in the second century A.D. in the commerce which reached from the head of the Arabian Gulf at Spasinou Charax into Roman Syria. However, toward the end of that century a series of wars in Mesopotamia seem to have adversely affected their commerce, causing some of the traders to begin using different routes such as those through Arabia. Accordingly, it seems that some Palmyrene merchants followed the trade upon which their livelihood depended into these new trade routes, which brought some of them to Egypt in the latter half of the second century A.D.

The evidence for Palmyrene involvement in the Red Sea trade is indeed quite considerable. One particularly important inscription found at Coptos records a dedication by a group of Palmyrene merchants of the Red Sea, which reads as follows:

\[
\begin{aligned}
\text{ι\ion{nu}{ou} Ζαβδάλα Σαμυδ} & \text{αν\ion{nu}{ou} καὶ \'Ανείνα \'Αδρια-} \\
\text{νων Παλμυρηνών} & \text{ναυκλήρων \'Ερυθραίων,} \\
\text{ἀναστήσαντα ἀπὸ θεμελιοῦ} & \text{τὸ προπόλαιον καὶ τὰς στοιχῶς} \\
\text{τρεῖς καὶ τὰ θυράδαντα ἕκ καὶ-} & \text{νῆς, τὰ πάντα ἕκ τῶν ἰδίων} \\
\text{αὐτοῦ, φιλοκαγαθίας χάριν} & \text{ἀπὸ τῶν φίλων.}
\end{aligned}
\]

... Zabdalas son of Salmanos, also (called ?) Aneinas, of the merchants of the Red Sea from Hadriane Palmyra, who has set up anew from the foundations the propylaea and the three stoas and the chambers, entirely from his own funds, his colleagues the merchants of Hadriane Palmyra (set this up) to their friend, for his friendship and distinction.290

289 See III. 7; IV. 1, 5 below.
290 J. Portes 103, adopting the rereading of J. Bingen “Une dédicace de marchands palmyréniens à Coptos” CE 59 (1984), 355-358. Although undated, the inscription is generally assigned to the mid-
This inscription appears to describe a distinct community of Palmyrene merchants and shipowners who were operating in the Egyptian Red Sea trade. Another fragmentary inscription from Denderah further downstream, generally dated between 160 and 212, also mentions Palmyrene merchants and ναυκλήροι, again seemingly indicating some considerable Palmyrene merchant activity in this later period.291

Indeed, the building in which the inscription was found at Coptos has been interpreted as having been the headquarters of a Palmyrene trade guild or some similar organisation, based upon the evidence from the inscription and twelve stelai found at the site carved in the typical Palmyrene ‘frontal’ pose.292 Although this interpretation has been challenged, as the stelai concerned are all of Egyptian workmanship,293 the inscription found there would certainly seem to indicate the existence of at least a Palmyrene community and some sort of cultic organisation at Coptos. Whether or not we could categorise such an entity as a “trade guild”, we can have little doubt that the Palmyrene merchants of Coptos and Denderah formed a notable and distinct community in these cities, and may well have combined their resources for commercial enterprises as well as for religious ones.

The commerce in which these merchants were engaged was, no doubt, the same as that in which the other merchants of Coptos were involved: that is, the Red Sea trade with Arabia and India. Some, however, have suggested that they might have been involved in the transportation of goods from Palmyra itself, through Arabia and

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291 OS II. 3910
292 A.J. Reinach “Rapports sur les fouilles de Koptos”, 64.
293 H. Seyrig “Le prétendu fondouq palmyrénien de Coptos” Syria 49 (1972), 120-125.
across the Red Sea, and then to the Nile valley.\textsuperscript{294} There is in fact no evidence at all to suggest that such an extraordinarily circuitous route was ever in use, and no reason to suppose that the Palmyrene merchants of Egypt were not private individuals engaged in the same trade as their counterparts from Roman Egypt and further afield.

These merchants were not the only Palmyrenes to be found in the Egyptian Eastern Desert, however. An inscription from Coptos\textsuperscript{295} shows that a unit of Palmyrene archers was based at that site at some time before A.D. 216.\textsuperscript{296} In addition, a Greek dedication uncovered in the 1996 season of excavation at Berenike was made by a Palmyrene archer named Julius Aurelius Mokimos to Caracalla and Julia Domna, and is dated to A.D. 215.\textsuperscript{297} It seems clear that Palmyrene auxiliaries were present at Coptos and were also involved in the patrolling of the desert roads between Coptos and the Red Sea ports. It is most probable that they were brought there due to the similarity of terrain in the Eastern Desert and the desert fringe of Syria, and the extensive Palmyrene experience in desert patrolling gained by the protection of caravans in Palmyrene territory.\textsuperscript{298} Their presence there also indicates the continuing necessity of protection and patrolling on the Eastern Desert roads, which must indicate that the trade was still functioning in this period.

The Palmyrenes, of course, were not the only people using these trade routes at this time: the eclectic mix of merchants who had always used this area continued to do so throughout the Severan period. The Medamoud inscription describing the

\textsuperscript{294} M.G. Raschke “New Studies in Roman Commerce with the East”, 644; J. Bingen “Une dédicace de marchands palmyréniens à Coptos”, 358.
\textsuperscript{295} IGRR I. 1169
\textsuperscript{296} M.P. Speidel “Palmyrenian Irregulars at Koptos” BASP 21 (1984), 221-224.
\textsuperscript{297} S.E. Sidebotham, personal communication, 16 Feb. 1996.
\textsuperscript{298} M.P. Speidel “Palmyrenian Irregulars at Koptos”, 221. See IV. 4 below for the Palmyrene role in caravan protection in Palmyrene territory.
trading activities of Aelia Isidora and Aelia Olympias which was described previously is generally dated to this period also, indicating the continuing participation of Egyptian Greeks in the commerce throughout this time. In addition, archaeological investigations appear to show that the commercial traffic was still using the Red Sea roads and ports: graffiti from the third century are present on the road between Coptos and Quseir al-Qadim, and there is evidence that the port of Berenike was also in use in this period.

The Severan period thus appears to have been a time of continuing activity at the Egyptian Red Sea ports, and of the maintenance of a reasonable level of prosperity. Sidebotham, however, contends that the Severan period was a time of declining contact with India, based on his reading of the late second/early third century written sources, which show a decreased awareness of places outside the Empire such as India and Arabia, and an apparently greater reliance on hearsay evidence than on observation. This may, however, be more a commentary on the quality of the sources than on the vitality of the eastern trade. Certainly, the evidence from the nature of secondary sources in the period cannot possibly override the evidence from inscriptions and archaeology, both of which seem to indicate quite strongly that the Red Sea traffic continued to operate during the Severan period.

299 See II. 3 above.
300 P. Jouget “Dédicace grecque de Médamoud”, 2. Sidebotham, however, prefers a mid second-century date, although this is based only on his opinion that the trade had declined in the Severan period. See S.E. Sidebotham Roman Economic Policy in the Erythra Thalassa, 87. For whether or not the trade did actually decline in the Severan period see below.
301 I.Koptos 58, 59, 60, 89, 91.
302 See II. 2 above.
303 S.E. Sidebotham Roman Economic Policy in the Erythra Thalassa, 163
Despite the fact that the trade seems to have been fairly strong in the earlier part of the century, there is considerable evidence to show that the Egyptian Red Sea trade suffered a marked downturn in the later third century. This is not to say that the trade ceased altogether: there is still evidence that the commerce through the Red Sea ports was active in the third century, such as the mention of Firmus' trading activities at that time in the Historia Augusta. Nonetheless, as will be seen, there is good reason to believe that the volume of commerce passing through the Egyptian Red Sea ports declined in the later part of the third century.

The archaeological evidence for such a decline is generally negative: that is, it consists for the most part of an absence of finds for the later third century as compared with the periods beforehand and afterward. As has been seen, there is considerable evidence for trading activity on the Red Sea from the Severan era; similarly, it will soon be seen that there is comparable solid evidence for the conduct of the trade in the fourth century. In the later third century, however, there is a marked absence of finds in most locations associated with the trade. While the absence of finds from just one or two locations could not be taken to have any real significance, a solid pattern of such absences from a wide variety of sites associated with the Egyptian Red Sea trade can legitimately be taken as evidence for a decline of the trade during the later third century.

Perhaps the most noticeable decline in the amount of physical evidence comes from the Egyptian Red Sea ports. It appears that the port of Quseir al-Qadim, which

\[304\ HA\ Quadr.\ Tyr.\ III.\ 3.\ See\ II.\ 3\ above.\]
we have elsewhere identified as Myos Hormos, ceased to be used by the middle of the third century. Ceramic and numismatic evidence from the site ceases almost entirely by the mid-third century, with the exception of one billon tetradrachm of the last half of the fourth century which cannot be taken by itself as evidence of the continued use of the port during that period.305 Similarly, the recent excavations at Berenike have uncovered a pattern of decline in the third century. Despite the presence of evidence from the first and second centuries and also from the fourth century, there appears to have been a significant falloff in activity at the port in the late third century, judging from the physical remains. Between the two periods of main use at the port, the first-second centuries A.D. and the fourth-fifth centuries, there is very little datable evidence.306

This apparent decline in volume of traffic using the Egyptian Red Sea ports also appears to parallel developments in the coin evidence from India. After the decline in the use of Roman silver coinage in southern India after the Julio-Claudian period, the major Roman currency used in Indian trading was the aureus. Numerous examples of imperial aurei from the Antonine and Severan periods have been discovered in southern India.307 However, there are no Roman coins at all from the later third century. While it is true that the aurei of this period were so heavily debased that they would have been in any case of extremely limited use in international trade,308 the apparent coincidence of the disappearance of Roman coins

307 For a list of these finds and their publications see M.G. Raschke “New Studies in Roman Commerce with the East”, 1037-1038.
308 K. Harl Coinage in the Roman Economy, 132-134.
from India with the decline of the Egyptian Red Sea ports would seem to indicate a
general downturn in the Red Sea commerce in the later third century.

Each taken by themselves, the decline of Myos Hormos, or Berenike, or the
cessation of the use of Roman coins in southern India would not be conclusive
evidence of a decline in the fortunes of the Red Sea trade at this time. However, when
taken together, they certainly do seem to indicate such a decline. In addition, as will be
seen further on in this work, there is also evidence for a similar decline in long-distance
commerce passing through Arabia from approximately the same time. Indeed, many
scholars have taken the evidence from coinage coupled with the evidence for severe
unrest in Egypt and throughout the Roman East in this period as sufficient to
establish a generalised decline in the Eastern trade. Coupled with the evidence from
the excavations at Berenike and Quseir al-Qadim, to which these scholars did not have
access, this evidence would seem to provide compelling reason to postulate a decline
in the fortunes of the eastern long-distance trade in the later third century A.D.

This decline occurred at the same time as the prolonged period of political
instability which affected the Roman Empire during the third century. While it is not
proposed to go into the reasons or the exact nature of this crisis, or indeed the
general effects other than those which directly affected the eastern commerce, it would

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309 See III. 7 below.
310 For unrest in Egypt, see this section; for banditry and other disturbances in Arabia see III. 5 below; for the Persian invasions of Syria and the Palmyrene revolt see IV. 5 below.
312 The so-called "Third Century Crisis" seems mainly to have been a time in which the Empire was subjected to serious outside pressure from enemies along the Rhine, Danube and in the East, causing emperors to debase the coinage in an effort to pay the soldiers. This debasement caused a public loss of confidence in the coinage resulting in rampant inflation followed by economic and political instability. For the crisis as it related to Roman coinage see K. Hart Coinage in the Roman Economy, 126-136.
appear that there may well be a link between the crisis of the third century and the decline in the long-distance eastern commerce which occurred at the same time.

There are several reasons why the events of the third century might have had a damaging effect on the eastern long-distance trade. The greater prevalence of warfare would, of course, impede the trade severely. It has already been seen that the trade began to prosper in a period of peace and Roman prosperity beginning in the later first century B.C.; it should hardly surprise us that the resurgence of internal warfare in the third century would damage the trade. Similarly, the rampant inflation which gripped the Roman world throughout the third century would have harmed international commerce as the buying power of Roman currency collapsed. The scale of this inflation is illustrated in the following charts, which show the decline in silver content of Roman *denarii* and *antoniniani* in the course of the third century:

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313 See I. 6 above.
314 The following charts are based upon D.R. Walker *The Metrology of the Roman Silver Coinage III* (Oxford 1978), 49-51.
### TABLE II. 1: ROMAN COINAGE IN THE THIRD CENTURY

Average Silver Content of Roman Imperial Denarii A.D. 193-241

<table>
<thead>
<tr>
<th>Emperor</th>
<th>Date</th>
<th>Silver X</th>
<th>Weight (g)</th>
<th>Silver Wt. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pertinax</td>
<td>193</td>
<td>87.11%</td>
<td>3.16</td>
<td>2.75</td>
</tr>
<tr>
<td>Didius Julianus</td>
<td>193</td>
<td>81.33%</td>
<td>2.95</td>
<td>2.40</td>
</tr>
<tr>
<td>Septimius Severus</td>
<td>193-4</td>
<td>78.42%</td>
<td>3.14</td>
<td>2.46</td>
</tr>
<tr>
<td>Septimius Severus</td>
<td>194-6</td>
<td>64.58%</td>
<td>3.07</td>
<td>1.98</td>
</tr>
<tr>
<td>Septimius Severus</td>
<td>196-211</td>
<td>56.28%</td>
<td>3.22</td>
<td>1.81</td>
</tr>
<tr>
<td>Caracalla</td>
<td>211</td>
<td>54.41%</td>
<td>3.20</td>
<td>1.75</td>
</tr>
<tr>
<td>Caracalla</td>
<td>212-215</td>
<td>50.94%</td>
<td>3.28</td>
<td>1.67</td>
</tr>
<tr>
<td>Caracalla</td>
<td>216</td>
<td>53.35%</td>
<td>3.15</td>
<td>1.68</td>
</tr>
<tr>
<td>Caracalla</td>
<td>217</td>
<td>50.78%</td>
<td>3.07</td>
<td>1.56</td>
</tr>
<tr>
<td>Macrinus</td>
<td>217-8</td>
<td>57.85%</td>
<td>3.15</td>
<td>1.82</td>
</tr>
<tr>
<td>Elagabalus</td>
<td>218-9</td>
<td>45.30%</td>
<td>3.15</td>
<td>1.43</td>
</tr>
<tr>
<td>Elagabalus</td>
<td>219-20</td>
<td>48.39%</td>
<td>2.96</td>
<td>1.43</td>
</tr>
<tr>
<td>Severus Alexander</td>
<td>222-8</td>
<td>43.03%</td>
<td>3.00</td>
<td>1.29</td>
</tr>
<tr>
<td>Severus Alexander</td>
<td>229-30</td>
<td>45.11%</td>
<td>3.24</td>
<td>1.46</td>
</tr>
<tr>
<td>Severus Alexander</td>
<td>231-5</td>
<td>50.56%</td>
<td>2.94</td>
<td>1.49</td>
</tr>
<tr>
<td>Maximinus Thrax</td>
<td>235-8</td>
<td>47.73%</td>
<td>3.04</td>
<td>1.46</td>
</tr>
<tr>
<td>Gordianus I &amp; II</td>
<td>238</td>
<td>62.80%</td>
<td>2.77</td>
<td>1.71</td>
</tr>
<tr>
<td>Balbinus &amp; Pupienus</td>
<td>238</td>
<td>55.00%</td>
<td>2.80</td>
<td>1.55</td>
</tr>
<tr>
<td>Gordianus III</td>
<td>240-1</td>
<td>48.11%</td>
<td>3.03</td>
<td>1.46</td>
</tr>
</tbody>
</table>

### TABLE II. 2: ROMAN COINAGE IN THE THIRD CENTURY

Average Silver Content of Roman Imperial Antoniniani A.D. 215-253

<table>
<thead>
<tr>
<th>Emperor</th>
<th>Date</th>
<th>Silver X</th>
<th>Weight (g)</th>
<th>Silver Wt. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caracalla</td>
<td>215-7</td>
<td>51.18%</td>
<td>5.09</td>
<td>2.60</td>
</tr>
<tr>
<td>Macrinus</td>
<td>217</td>
<td>60.38%</td>
<td>4.87</td>
<td>2.94</td>
</tr>
<tr>
<td>Elagabalus</td>
<td>218-9</td>
<td>45.58%</td>
<td>4.94</td>
<td>2.26</td>
</tr>
<tr>
<td>Balbinus &amp; Pupienus</td>
<td>238</td>
<td>49.75%</td>
<td>4.79</td>
<td>2.37</td>
</tr>
<tr>
<td>Gordianus III</td>
<td>238-9</td>
<td>47.77%</td>
<td>4.51</td>
<td>2.16</td>
</tr>
<tr>
<td>Gordianus III</td>
<td>240</td>
<td>49.77%</td>
<td>4.48</td>
<td>2.24</td>
</tr>
<tr>
<td>Gordianus III</td>
<td>241-3</td>
<td>44.68%</td>
<td>4.43</td>
<td>1.98</td>
</tr>
<tr>
<td>Gordianus III</td>
<td>243-4</td>
<td>41.63%</td>
<td>4.16</td>
<td>1.66</td>
</tr>
<tr>
<td>Philip</td>
<td>244-5</td>
<td>42.82%</td>
<td>4.22</td>
<td>1.82</td>
</tr>
<tr>
<td>Philip</td>
<td>245-7</td>
<td>43.25%</td>
<td>4.01</td>
<td>1.74</td>
</tr>
<tr>
<td>Philip</td>
<td>247-8</td>
<td>43.25%</td>
<td>4.14</td>
<td>1.78</td>
</tr>
<tr>
<td>Philip</td>
<td>248-9</td>
<td>47.07%</td>
<td>4.12</td>
<td>1.94</td>
</tr>
<tr>
<td>Decius</td>
<td>249</td>
<td>47.64%</td>
<td>4.02</td>
<td>1.92</td>
</tr>
<tr>
<td>Decius</td>
<td>250-1</td>
<td>41.12%</td>
<td>3.97</td>
<td>1.64</td>
</tr>
<tr>
<td>Gallus</td>
<td>251</td>
<td>36.54%</td>
<td>3.42</td>
<td>1.26</td>
</tr>
<tr>
<td>Gallus</td>
<td>252</td>
<td>36.15%</td>
<td>3.52</td>
<td>1.28</td>
</tr>
<tr>
<td>Gallus</td>
<td>253</td>
<td>35.12%</td>
<td>3.45</td>
<td>1.22</td>
</tr>
<tr>
<td>Aemilian</td>
<td>253</td>
<td>35.50%</td>
<td>3.53</td>
<td>1.36</td>
</tr>
</tbody>
</table>
It seems that, as the central government struggled to find bullion to pay the troops, it resorted to systematic debasement to obtain more coinage. As this took place, however, the confidence of traders in the coinage eroded, and trade tended to be carried on in barter rather than monetary transactions. Given the greater degree of difficulty of transporting bulk goods, long-distance trade must have been severely affected. In addition, the serious inflation already noted which was a characteristic of the period would have greatly reduced the ability of citizens to purchase luxury goods.

Thus, the effects of an increase in unrest, an unreliable coinage, and a diminishing market combined to curtail severely the activities of the eastern long-distance trade in general and the Egyptian Red Sea trade in particular. While such a reduction is impossible to quantify, we may gain some idea of the scale of the reduction by examining the effects of the crisis on internal trade within the Empire, as reflected in the numbers of shipwrecks from given periods of time. The shipwrecks found in the Mediterranean from the Late Hellenistic and Roman periods show that the greatest period of trading activity was from c.200 B.C. - A.D. 200, with a significant dip in the third century, recovering somewhat in the fourth. While these figures obviously refer to internal trade, it would seem most likely that the trade with areas outside the Empire will have been reduced by a similar proportion. Thus, it seems clear that the fortunes of the long-distance commerce of the Roman Empire

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315 Ibid., 106-148.
317 K. Hopkins "Taxes and Trade in the Roman Empire", 105-106.
declined considerably in the third century, most probably as a result of the prolonged political and inflationary crisis which affected the Roman world at that time.

In addition to the effects upon the trade which the financial crisis of the third century appears to have had, there were other ways in which the situation in the third century seems to have affected the Red Sea trade in Egypt in particular. The later third century was a time of rising unrest and banditry in Egypt, probably caused by the onerous tax burdens imposed by the government in an effort to increase the supply of money. This unrest would have made the caravan routes across the Eastern Desert far more dangerous than before, and appears to have also affected the commerce in other ways.

Egypt seems to have suffered severe demographic disruption after the 160’s A.D., and this situation does not appear to have been corrected throughout the third century. Banditry had always been a problem in Egypt, but the problem seems to have intensified in the later second and third centuries as may villagers left their homes and often took up a life of banditry in order to avoid their increasingly burdensome tax obligations. As discussed by Alston, *P.Thmouis*, an account of taxation in a region of the Nile Delta, records a catastrophic decline in the population of several villages as well as severe unrest in the 160’s A.D. 318 The unsettled conditions of the third century, rampant inflation and increased taxation can only have worsened the situation, and it is quite likely that this increase in banditry and unrest would have contributed to the decline in the Red Sea commerce.

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318 R. Alston *Soldier and Society in Roman Egypt*, 81-86.
The situation became much worse in the last thirty years of the third century, however, as Egypt was racked by a series of invasions and rebellions which were not ended until after Diocletian regained control of Egypt at the end of the century. The Blemmyes, a nomadic tribe from the south, began to raid and occupy the southern parts of Egypt and the Eastern Desert in the later third century, and continued to do so throughout the fourth and fifth centuries. They raided extensively in the latter part of the third century, seizing Coptos between 268-270 until they were finally driven off by the future emperor Probus. They continued to trouble southern Egypt for many years, resulting in a retraction of the frontier to Philae south of Syene by Diocletian and the creation of a special command against them, the dux Aegypti et Thebaidos ultrarumque Libyarum, which is attested from A.D. 308/309 at Luxor. Nonetheless, they continued to occupy large areas of southern Egypt and the Eastern Desert at various times throughout the next two centuries. It is also possible that the Blemmyes' attack on Coptos in 268 may have been part of an alliance with the Palmyrenes who invaded Egypt in 270 and occupied the country until their defeat by Aurelian in 272.

Following on from these Blemmye and Palmyrene invasions, Egypt was racked by a long series of imperial usurpations, beginning with Firmus soon after the expulsion of the Palmyrenes, and culminating with those of Achilleus and Domitius Domitianus in the reign of Diocletian. In the suppression of the latter, Diocletian

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320 HA Probus XVII. 3: Zosimus I. 71. 1
321 Procopius Pers. 1. 19. 27-33
destroyed the city of Coptos in about 297, and besieged the city of Alexandria.\textsuperscript{324}

Thus, even if the Egyptian Red Sea trade had been able to survive the effects of the financial crisis which enveloped the Empire in the mid to late third century, it assuredly could not have survived the overrunning of its trade routes by the Blemmyes and the destruction of two nodal points in the commerce by Diocletian. Thus, the end of the third century appears to have been a time when the Egyptian Red Sea trade was basically untenable: the market for its goods had declined due to the Empire's financial crisis, the routes across the Eastern Desert were troubled by bandits and nomadic tribes, and finally two of the most important centres of the commerce had been taken out of action. Clearly, if the commerce was to recover at all, there would need to be a recovery in the financial situation of the Empire in general, and a restoration of order to Egypt in particular. Both these things, as will be seen, took place in the fourth century.

\textit{Recovery of the Trade in the Later Period}

After the disruption of the third century there is some reason to believe that the Egyptian Red Sea commerce recovered to some extent in the fourth century. The port of Clysma, perhaps profiting from the destruction of Coptos, seems to have become significant in this time, while evidence from the Egyptian Red Sea coast indicates that some trade continued to pass through that region also. It thus appears

\textsuperscript{323} For the Palmyrene invasion of Egypt see IV. 5 below. For the possible alliance of the Blemmyes with the Palmyrenes (and later with Firmus) see J. Schwartz \textit{BSRAA} 37 (1948), 38, 43.

\textsuperscript{324} Jerome \textit{Chronicon} a.226; Eutropius \textit{Brev.} IX. 22-23. For the movements of Diocletian at this time and his campaigns in Egypt see S. Williams \textit{Diocletian and the Roman Recovery} (London 1985), 78-88.
that the Red Sea trade did recover to some extent from the poor state into which it had fallen in the later third century: presumably this was because of the re-establishment of order in the Empire by Diocletian and Constantine, and the restablilisation of the currency, especially Constantine’s introduction of the gold solidus which became the pre-eminent trade coin of the whole East in the Late Roman and Byzantine periods. 325

There is considerable evidence to indicate that Trajan’s canal between the Nile and the Red Sea and its associated port of Clyisma was at its peak of trading activity in the fourth and fifth centuries A.D. As has already been noted, the papyrological evidence dealing with the use of the canal dates almost entirely from this period;326 literary evidence also points to the use of Clyisma as a port for the Indian trade in the fourth century.327 The archaeological record indicates that this was a period of high use of the port at Clyisma: more than three thousand coins of the later Roman period were found in the French excavations of Clyisma in the 1930’s compared to only one coin of Hadrian from the preceding period.328 It therefore seems that there is solid evidence for the prosperity of Clyisma in particular, and of the Red Sea trade in general, from the fourth and fifth centuries A.D. As Raschke has suggested, it is likely that this surge in use of Trajan’s canal and of the port at Clyisma is due to Diocletian’s destruction of Coptos, which would have rendered the more southerly ports of the Red Sea temporarily unusable.329 Combined with the resurgence in the financial state of the Empire at the close of the third century, this created a new demand for readily accessible ports in the northern end of the Red Sea. Clyisma was one obvious choice;

325 K. Hart Coinage in the Roman Economy, 312.
326 See II. 5 above.
327 Itinerarium Egeriae vi. 4. 7
Aila (‘Aqaba) in Arabia, which also experienced a surge in prosperity at this time, was another.\textsuperscript{330}

Despite this, it would seem that the ports of the southern Red Sea soon recovered from the destruction of Coptos and were able to participate in the renewed period of prosperity in the fourth century. Evidence from the excavations at Berenike shows that the port recovered from the slump of the later third century and continued in use well into the Byzantine period. Indeed, the majority of trenches at the site contained substantial evidence of activity at the port from the early fourth century through to the early sixth century,\textsuperscript{331} including apparent evidence of contact with South Arabia and/or Axum.\textsuperscript{332} Interestingly, a great deal of the evidence from this period seems to indicate the presence of a distinct non-Egyptian ethnic group at the site: it is possible that these are in fact the Blemmyes, who perhaps controlled the port at this time.\textsuperscript{333}

In addition to Berenike, another port of the Red Sea coast seems to have come into use at this time. The University of Delaware’s excavations of the late Roman fort of Abu Sha’ar on the Red Sea coast have revealed use of this installation from the fourth century A.D. through to the seventh. This occupation is divided into a military occupation from the late third/early fourth century to some time later in the fourth century when the fort was abandoned, and a Christian settlement making use of the

\textsuperscript{328} B. Bruyère \textit{Fouilles de Clysma-Qolzoum (Suez)}, 90-94. See now also P. Mayerson “The Port of Clysma (Suez) in Transition from Roman to Arab Rule” \textit{JNES} 55 (1996), 119-126.
\textsuperscript{329} M.G. Raschke “New Studies in Roman Commerce with the East”, 649.
\textsuperscript{330} See III. 7 below.
\textsuperscript{331} S.E. Sidebotham “The Excavations”, 96.
\textsuperscript{332} G. Gragg “South Arabian/Axumite Dipinto” in S.E. Sidebotham & W.Z. Wendrich (eds.) \textit{Berenike ’95}, 209-211.
abandoned fort which existed there from perhaps the late fourth/early fifth century through to the early seventh century. Epigraphic evidence found at the site seems to indicate that Abu Sha’ar was used as a port for the Indian trade, at least in the early period of its occupation. A Latin inscription found at the site read

\[ \text{noua Maximia} \]
\[ \text{um mercator} \]

The publishers suggest a reconstruction of \textit{ad usum mercatorum} or something similar, with \textit{Noua Maximiana} being the designation of a military unit: this reading seems likely.

This would then indicate that the early fourth century occupation of the site (based on the name of the military unit and a Tetrarchic dedication also found at the site) was for the use of merchants; that is, the fort and military protection in the area was designed to protect the Red Sea trade, in the same way that the forts of the Coptos - Berenike and Coptos - Quseir al-Qadim roads were used in the first and second centuries. It seems clear, therefore, that the trade had recovered to some extent in the early fourth century, and there were once more merchants operating on the Red Sea coast whose potential tax contribution made them worth protecting.

Further evidence for a resurgence of the trade with India in the fourth century A.D. is provided by the numismatic evidence from the subcontinent itself, especially that from Sri Lanka which acquires a great deal of importance in this period. Indeed, the volume of Roman coins from Sri Lanka is quite considerable in this period,

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336 This use may have continued into the Christian period of occupation: a Greek inscription, probably from the sixth century, reads \textit{ἐγώ Ἀνδρέας [...] ἤλθον ὁδε [...]}. (Ibid., 115).
337 Ibid., 162-163.
showing that the late Roman and Byzantine periods represent the time of greatest trading contact with Sri Lanka. The fourth and fifth centuries are particularly well represented in this numismatic record, the most common coin finds being issues of Constantine I, Constantius II, Valentinian I and Theodosius I.338

It seems, however, that when the Roman traders re-entered the Indian Ocean, they were faced with competition from Persian and Axumite traders who had presumably established themselves while the Romans were absent in the later third century. The discovery of Persian and Axumite coins from this period at various points concerned with the Indian Ocean trade indicates that these traders were certainly active at this time,339 and there are literary references to competition between Roman and Persian traders in the Indian Ocean during this period as well.340 Nonetheless it would be greatly overstating the case to contend that the trade was now entirely in the hands of the Persian and Axumite ‘middlemen’, as the aforementioned literary reference certainly describes Roman traders being present in Sri Lanka. While it seems certain that Persian and Axumite traders were now also present in the Indian Ocean, there is no reason to suppose that Roman merchants were absent.

It seems clear therefore that the Red Sea commerce experienced a significant recovery at the close of the period under study, when the fortunes of the Roman Empire, badly shaken in the later third century, were revived by the efforts of Diocletian and Constantine. This is demonstrated by the archaeological evidence from

337 Ibid., 159. The fragmentary inscription appears to mention Galerius and Licinius as Augusti and Constantine as fil. Augg., thus dating the inscription between 308 and 311.
the Red Sea ports, which indicates a surge in activity at this time compared to the lull in the previous period, as well as the numismatic evidence, especially from Sri Lanka, which shows that a significant commerce was underway between that island and the Mediterranean world in the fourth and fifth centuries, and indeed throughout the Byzantine period. Nonetheless, the structure of the commerce had changed somewhat, with more emphasis now being placed on ports in the north of the Red Sea, Clysma and Aila, rather than those further south, although it appears that some of these continued to operate at this time. In addition, it seems that the Roman traders now faced more competition in the markets of the Indian Ocean from Persian and Axumite traders. Despite this, the presence of significant finds of Roman coins in Sri Lanka from this time indicates that the merchants of the Roman Empire were still active in the Indian Ocean at this time.

**Conclusion**

The third century was thus a period of great variety in the fortunes of the Egyptian Red Sea trade. Indeed, we may well describe this time as the end of the “Classical” period in the commerce, and the beginning of the “Byzantine” period of trade patterns. At the beginning of the century, during the Severan period, the trade continued along lines which it had followed since the time of Augustus. However, later in the third century, when a severe political and economic crisis gripped the Empire, the trade was profoundly affected. The political crisis coupled with severe barbarian invasions caused a monetary crisis as the government struggled to find coin

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340 Cosmas Indicopleustes *Christian Topography* 11
to pay the troops. The coinage was greatly devalued, which adversely affected trade both within and across the borders of the Empire. In addition, the effects of the political crisis in Egypt, which included chronic tax-evasion, depopulation and resultant banditry coupled with internal revolt and external invasions, made the Red Sea trade untenable. This trend reached its climax with the siege of Alexandria and the destruction of Coptos by Diocletian at the end of the century, by which time it would seem the Red Sea commerce had almost ground to a halt.

The political and economic recovery under the Tetrarchy and Constantine, however, seem to have soon revitalised the trade at the commencement of the fourth century. By this time, however, much had changed in the Indian Ocean, and the trade assumed the pattern which it took throughout the Byzantine period. Firstly, perhaps due to the destruction of Coptos, much of the trading activity in the Red Sea was now centred upon the northern end of the sea, around Clyisma and Aila. Secondly, Persian and Axumite merchants were more active than before in the commerce, although the Romans were quickly able to re-establish themselves. Thirdly, Sri Lanka now emerges for the first time as a major centre of trade in the Indian Ocean, a distinction which it was to maintain throughout the Byzantine period.

Thus, we may well see the third century as a pivotal point in the history of the Red Sea trade, and indeed as shall be seen, the Roman eastern trade in general. During this time, the patterns which the eastern commerce followed throughout the classical period were finally abandoned, and a new set of patterns, which characterised the trade until the coming of Islam, were set in place.
II.7 Conclusion: The Significance of the Trade in Egypt

In this chapter, we have examined a large accumulation of evidence about the eastern long-distance commerce in Egypt, which has allowed us to learn a great deal about this trade. By an examination of the evidence, then, it is possible to reconstruct with some accuracy the manner in which the trade was carried out. It was found that the Egyptian trade was derived from sea traffic originating in three main areas: Africa, India and Arabia. In addition, some ships on the Indian run on some occasions appear to have travelled further east, reaching Sri Lanka, Indo-China and perhaps even China itself, although such incidences were isolated and cannot be considered a regular trading run. After the goods were offloaded at one of the Red Sea ports, they were then transported across the desert to the Nile city of Coptos, from which they were then transported down the Nile to Alexandria. At Alexandria, the 25% duty on incoming goods was paid, and the goods were then usually sold for reprocessing and shipping to Rome and other markets throughout the Empire. Much of the reprocessing for these markets was probably done in Alexandria.

Regrettably, the relative economic significance which the trade had in Roman Egypt is impossible to discover, given the absence of any reliable or usable trade figures. We can, however, see that there were some groups of people who were able to make a living from the trade, not only the merchants directly involved in the commerce, but also those who benefited indirectly from the commerce, such as camel-drivers, sailors, shipbuilders and others. The fact that numerous people were thus able to gain a living from the commerce would of course indicate that the trade was not insignificant. Inevitably, however, in a province with such a diverse economy as was
possessed by Egypt, the significance of the trade must have been watered down to some extent. Nonetheless, it cannot but have contributed to the overall prosperity of Roman Egypt: to what extent, however, it is very difficult to say.

The commerce does, however, appear to have been of some significance to the Roman government, especially considering the expense and effort that was put into the construction and maintenance of military facilities in the Eastern Desert. This interest is related entirely to the collection of the taxes which were imposed on the trade, however, and accordingly theories of Roman involvement for political reasons, such as to weaken other trade routes, should be rejected. In order to ensure that the merchants paid their taxes, it was necessary both to protect them from brigandage and to prevent them from disposing of their goods before the taxes were paid. The revenue from the taxes, especially the 25% tax paid in Alexandria, must have been considerable,\textsuperscript{341} and is more than enough to explain the Roman military presence in the Egyptian Eastern Desert.

The Roman interest in the Red Sea trade, then, should essentially be seen as a reactive one. The Romans should not be understood as encouraging the Red Sea trade by the provision of facilities (for whatever reason), but rather as reacting to the existence of a trade that was already there, and being primarily interested in protecting the trade as a source of imperial income. This military protection can thus be seen as analogous to that provided for the quarries in the Eastern Desert: both are simply to protect imperial income, although the income from the quarries was direct rather than indirect as was the case with the Red Sea trade. Having said this, however, the

\textsuperscript{341} For an estimate of the significance of these taxes to overall imperial income see VI. 2 below.
construction of the _Amnis Traianus_ and the _Via Hadriana_ in the second century A.D. both seem to be the provision of a new trade route for the benefit of traders. As was discussed, there are nonetheless alternative explanations for the provision of these facilities. Even if they can be shown to have been designed as direct encouragements to the Eastern trade, they should probably be regarded as exceptions to the normal Roman practice rather than examples of it.

This state of affairs appears to have persisted until the later third century, when the Roman economic crisis seems to have caused significant unrest in the East and a probable drop in the demand at Rome for luxury goods. In the face of these developments, the Egyptian Red Sea trade appears to have suffered a severe downturn, resulting in a cessation or serious decline of activity at the ports of Myos Hormos and Berenike. After the economy of the Empire began to recover in the period of the Tetrarchy, however, the trade appears to have begun again, although not perhaps with the intensity with which it had been carried on previously, and certainly following a new set of trading patterns which were to persist until the arrival of Islam in the seventh century.

Despite the relative abundance of evidence concerning the Red Sea trade in Egypt, it is quite difficult to attempt to determine the significance of the commerce in that province. Unlike such places as Petra or Palmyra, where the commerce would appear to have contributed substantially to the wealth of those places, the trade in Egypt existed against the backdrop of a lively and diverse economy, making it difficult if not impossible to determine the relative significance of one element of that

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342 See III. 3, 6; IV. 4 below.
economy. Nonetheless, the evidence we have allows us to build a picture of a significant and important trade, in which were involved not only merchants but also many ancillary traders who drew their livelihood from the needs of the Red Sea commerce. Indeed, this picture is far more detailed than that which we are able to glean from any other area where the trade was active, and the conclusions drawn here may in fact be applicable in other areas where our information is more limited.
III. THE ARABIAN INCENSE TRADE

Like the sea trade into Egypt, the overland trade in aromatics which reached Arabia already had a long history by the time of the Roman entry into the affairs of the East in the first century B.C. The Arabian perfumes of frankincense and myrrh had long been prized among the peoples of the Near East, and, as noted in the Introduction, had become an important part of both Near Eastern and Mediterranean religious practices. Accordingly, a strong market already existed for these commodities in the Mediterranean world, and the inhabitants both of the incense producing regions and of those regions on the trade routes were able to exploit this market to their advantage.¹

In the Hellenistic period the Nabataean kingdom seems to have been established in the area of Arabia and southern Palestine which was crossed by these overland routes on their way to the Mediterranean. Soon, this kingdom was heavily involved in the trade and, by the time of the Romans' appearance in the East, had attained considerable wealth and power.² However, the relative importance of this trade in determining the fortunes of the Nabataean kingdom has been a subject of considerable scholarly debate, as has been the actual sources of the trade and the routes by which it was carried into and throughout the kingdom. Accordingly, this chapter will focus on the routes by which the incense came into the Nabataean kingdom and then relate what can be known about the history of this trade throughout

¹ For the history of the use of these incenses see N. Groom Frankincense and Myrrh.
² For general accounts of Nabataean history see J. Starcky "Petra et la Nabatène" Supplément au dictionnaire de la Bible 7 (1966), 886-1017; P.C. Hammond The Nabataeans: Their History.
the Roman period. From this, and from the other evidence concerning the trade which can be assembled, an attempt will be made to determine what effect the trade had upon the societies of Nabataean and Roman Arabia, and upon political developments in those spheres.

III.1 The Trade Routes of the Nabataean Kingdom

The Nabataean Kingdom seems to have derived a considerable proportion of its wealth and prosperity on the trade in aromatics long before the Romans came upon the scene. The Nabataeans, who appear to have originated in the Arabian peninsula but seem by their inscriptions to have spoken, or at least written, a dialect of Aramaic, occupied the area south and east of the Dead Sea by the fourth century B.C. By the first century B.C. they had expanded to become a wealthy and powerful kingdom by their control and exploitation of caravan routes through their territory. In the first literary reference to the Nabataeans, Diodorus Siculus refers to their wealth and its source:

{oik olkyn d' dttwv 'Arabikov evno twv tiv evymov evnemovtwv ou'tov poliv twv allow proekouv taiv evporiais, tiv anhimov dntes ou poliv pleovs twv mhrov elvbetai, gar autwv oik olkoi katagein etpi thalasovn lithwvovn te kai smpovn kai tv polvelsetata tvn anhimatai, diadekwmovn par tvn komiztvwv ek tiv Eudaivuov kalumvnes 'Arabias.

Although there are not a few of the Arab tribes using the desert as pasture, these greatly exceed the others in wealth, being not much more than ten thousand in number. For not a few of them are accustomed to bring down to the sea frankincense, myrrh and the most valuable of the aromatics which they receive from those who carry them from Arabia called Eudaimon.4

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Diodorus Siculus XIX. 94. 4-5
It can be seen from this quotation that, in Diodorus' view at least, the wealth of the Nabataeans was based upon their trade in aromatics and had been well established by 31 B.C. As was noted earlier, their trade seems to have been chiefly in the South Arabian aromatics such as frankincense and myrrh rather than in the Indian spices and other Chinese and Indian goods which made their way into the Red Sea by the sea passage from India. It remains possible, however, that some of these Indian spices could have found their way to Petra from Eudaimon Arabia (Aden), which is known to have received cargoes from India. Nonetheless, all literary references to Petra's trade refer solely to South Arabian aromatics, and it must therefore be assumed that these formed the basis of Nabataean wealth, at least insofar as that wealth was derived from trade. This is a point which deserves some emphasis, as many scholars have mistakenly assumed that Petra grew wealthy on the proceeds of Chinese and Indian goods. There is in fact no solid evidence for this at all, and consequently to speak of the Nabataean kingdom as a participant in a wider 'spice trade' in commodities from India and China is clearly a mistake. The various trade routes of the ancient world were often dependent upon differing commodities and thus were not necessarily related to or affected by trade in other commodities upon other routes. The particular commodities that enriched the Nabataean kingdom were frankincense and myrrh, and

5 I. 5 above.
6 Periplus 26
8 That the Nabataean wealth was chiefly derived from the proceeds of trade certainly seems to be the opinion of the ancient writers: see III. 3 below.
9 See e.g. J.I. Miller The Spice Trade of the Roman Empire, 133-134, although more recent works are not immune from this error either, e.g. G.W. Bowersock Roman Arabia, 15, 21. As noted earlier (I. 5) there is a reference to cinnamon being brought over from Somalia to South Arabia (and then conceivably through the Nabataean kingdom) in Pliny NH XII. 42, but this more likely refers to a plant native to Somalia which was only later supplanted by the superior Asian cinnamon we know
later developments in the trade in silk and spices from further afield, for example the rise of the trade from India through Palmyra, would have had no significant effect on this commerce.

The Overland Trade Routes of the Nabataean Kingdom

The incense trade of the Nabataeans, according to Strabo, was supplied by two main sources: the Minaeans, living in southwestern Arabia, and the Gerrhaeans who lived near the Persian Gulf.\(^\text{10}\) Of the routes from these two sources of supply, that from the Minaeans, known commonly as ‘The Incense Road’, is quite well attested. In describing the trade in frankincense, Pliny related how the incense had to be brought through the land of the Gebbanitae\(^\text{11}\), a tribe of southern Arabia who appear to have had a monopoly over the frankincense commerce, and then carried up a long route through Petra and thence to Gaza in sixty-five daily stages:

\[
euehi non potest nisi per Gebbanitas, itaque et horum regi penditur uectigal. caput eorum Thomna abest a Gaza nostri litoris in Iudaea oppido LXVI LXXXVII D p., quod diuiditur in mansiones camelorum LX. sunt et quae sacerdotibus dantur portiones scribisque regum certae, sed praeter hos et custodes satellitesque et ostiarii et ministri populantur: iam quacumque iter est aliubi pro aqua aliubi pro pabulo aut pro mansionibus uariisque portoriis pendunt, ut sumptus in singulas camelos \(\times\) DCLXXXVIII ad nostrum litus colligat, iterumque imperii nostri publicanis penditur.
\]

It cannot be carried except through the Gebbanitae, and thus a tax to their king is also paid. Their capital Thomna is 1487 1/2 miles from the town of Gaza in Judaea, on the Mediterranean Sea, which journey is divided into sixty-five stages for camels. There are also fixed portions which are given to the priests and royal scribes, but beside these the guards and their attendants, the

\(^\text{10}\) Strabo Geog. XVI. 4. 18
\(^\text{11}\) For the political situation of Southern Arabia at this time see N. Groom Frankincense and Myrrh 165-188; L. Casson The Periplus Maris Erythraei, 44-49.
gatekeepers and the servants plunder also: indeed wherever their journey goes they pay at one place for water, at another for food or lodging, and also the various taxes, so that for one camel 688 denarii are consumed in reaching the Mediterranean, and then taxes are paid to the publicans of our Empire. 12

This account clearly shows the existence of this route, as well as the considerable expense involved in carrying the incense to the Mediterranean. These expenses may well have caused sea transport, which was very much cheaper, 13 to come to supplant some of the land trade. However, as will be discussed in the next section, it would appear that the land trade continued throughout the first century A.D. despite the presence of competing seaborne traffic through the Red Sea.

In addition, the presence of an important Nabataean station at Hegra in the Hejaz testifies to the importance of the land-based incense route from Southern Arabia and its continued vitality throughout the first century. This station, the modern site of Medain Saleh in Saudi Arabia, was established as a major Nabataean military post in the late first century B.C. 14 This is attested by a series of impressive rock-cut tombs of Nabataean military officers and officials, many of which can be accurately dated by their inscriptions. The earliest tomb dates to A.D. 1 while the last bears a date of A.D. 75. 15 While various ideas have been suggested as to the purpose of this outpost, such as a fallback position in the event of Roman invasion of the kingdom, 16 or as a defensive frontier post, 17 it seems most probable that an outpost of such size so far from the center of the kingdom must have been there to protect a

12 Pliny NH XII. 32
13 See R. Duncan-Jones The Economy of the Roman Empire, 366-369.
16 G.W. Bowersock Roman Arabia, 57.
valuable commodity indeed, and this can have been none other than the incense trade. The station is simply too far from the core of the kingdom to have had anything to do with its defence, and it could not have been a 'fallback' position because this remote locality would be unsustainable without the remainder of the kingdom to support it. The incense trade is in fact the only significant asset the Nabataean kingdom possessed in this region, and is accordingly the only plausible explanation for the construction of Hegra. The investment by the Nabataeans of considerable resources in constructing and maintaining this base shows that the overland incense trade through this site was of great significance to the kingdom.

The other source of overland traffic appears to have come from the city of Gerrha on the Persian Gulf, mentioned by both Strabo and Pliny. Strabo furthermore states that the Gerrhaean merchants dealt in Arabian aromatics which they obtained from South Arabia, travelling there in forty days as against the seventy days taken by those who came from Aila (modern 'Aqaba). Given its geographical location, much of the trade of Gerrha would probably have been with the Parthian realm, as Strabo relates. However, it would also seem that some of the incense was carried to Petra, because Strabo states (as already noted) that the Gerrhaeans and Minaeans carried

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17 J. Bowsher “The Frontier Post of Medain Saleh”, 27.
18 Strabo Geog. XVI. 3. 3; Pliny NH VI. 32
19 Strabo Geog. XVI. 4. 4. Such a trade route would probably have branched off the Incense road near Tathlith, c. 200km north of Najran (see map III.1), passing through the recently excavated trading centre of Qaryat al-Faw and thence to Gerrha. See N. Groom Frankincense and Myrrh, 197; A.A.T. al-Ansary (ed.) Qaryat al-Faw: Studies in the History of Arabia II: Pre-Islamic Arabia (Riyadh 1984). It should, however, be noted that most MSS of Strabo actually read Ἰαβαῖων rather than Γεββαῖων, and it has been suggested (A.F.L. Beeston, “Some Observations on Greek and Latin Data Relating to South Arabia” BSOAS 62 [1979], 8) that Strabo is actually referring to Pliny’s Gebbanitae, and not to the Gerrhaeans at all. Regardless of whether or not this is the case, however, it is still true that the Gerrhaeans trafficked in Arabian aromatics (Strabo Geog. XVI. 3. 3), which they must have brought from the incense growing regions of Southern Arabia by some means.
20 Strabo Geog. XVI. 3. 3

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their incense into the country of Palestine through Petra. Thus it would seem that there were two major roads by which the incense was brought to Petra: along the more direct route from South Arabia to Aila and thence to Petra, and via Gerrha and then across the North of Arabia to Petra.

This latter traffic may have travelled by a route between Mesopotamia and Petra via Dumata (Jawf in Saudi Arabia) mentioned in a confused account by Pliny, although the usefulness of this route is questioned by Potts, who prefers a route further south directly from Gerrha via Teima. It may, of course, have been the case that both routes were in use: the Gerrhaeans may have sent their merchandise directly overland by the route through Teima, or by raft up the Euphrates through Babylon and thence overland through Dumata, and from there either to Teima or directly to Petra. Certainly it seems that Strabo was aware that both overland and riverine transport were used:

\[
\text{πεζέμποροι δ' εισήν οἱ Γερραιοί τῷ πλέον τῶν Ἀραβίων φορτίων καὶ ἄρωμάτων. Ἀριστοβούλους δὲ τοῦνατίν ρησὶ τοὺς Γερραιοὺς τὰ πολλὰ σχεδίας εἰς τὴν Βαβυλωνίαν ἐμπορεύεσθαι, ἐκείθεν δὲ τῷ Εὐφράτῃ τὰ φορτία ἀναπλεῖν εἰς Θάψακον, ἐτὰ πεζῆ κοιμᾶσθαι πάντῃ.}
\]

The Gerrhaeans for the greater part trade by land in Arabian goods and aromatics. Aristobulus, however, says that the Gerrhaeans carry most of their goods by rafts to Babylon, and from there they sail the goods up the Euphrates to Thapsacus, and then they carry it overland to all parts.24

21 Strabo Geog. XVI. 4. 18
22 Pliny NH VI. 32
24 Strabo Geog. XVI. 3. 3
MAP III. 1 CARAVAN TRACKS OF THE ARABIAN PENINSULA

Showing the major caravan tracks in use in the first centuries B.C. & A.D. which are discussed in the text. Titles of kingdoms are those used in the Periplus.

KEY

- Cities
- Caravan Tracks

SCALE

0 200 400 km

NORTH
This passage would seem, then, to allow both routes. The land based route, following the most direct path from Gerrha to Petra, would certainly make more sense if it followed the route proposed by Potts; although Strabo mentions that the Gerrhaeans trafficked by land and that they brought their incense to Petra, he nowhere indicates by which path this trade may have travelled. The path via Teima would certainly seem to be the most logical.

However, Potts ignores the riverine route described by Strabo and Pliny in his rejection of the possibility of Gerrhaean caravans passing through Dumata. While Strabo speaks of this riverine traffic going all the way up the river to Thapsacus, Pliny’s mention of a route from Mesopotamia through Dumata makes it likely that some of this Euphrates traffic was sent through this route. Thus, when the geographers' accounts are taken into consideration, it becomes apparent that traffic may well have used the oasis of Dumata in coming from Gerrha to Petra. It would appear from the literary evidence that Gerrhaean trade reached the Roman Empire through three routes: directly up the Euphrates to Thapsacus, bypassing Petra altogether, or leaving the river at Babylon and crossing the desert to Dumata and then to Petra either directly or via Teima, or directly overland from Gerrha via Teima and Hegra to Petra.

There is, indeed, further support for this view in the evidence for Nabataean occupation which is to be found at both Teima and Dumata. In the case of Teima the presence of Nabataean inscriptions and pottery indicate that this oasis may well have
been a part of the Nabataean kingdom.\footnote{P.-L. Gatier \& J.-F. Salles "Aux frontières méridionales du domaine Nabatéen" in J.-F. Salles (ed.) \textit{L'Arabie et ses mers bordières}, 181-183.} One funerary inscription in particular carries the formulaic phrase “for the life of...” which is usually followed by the name of a Nabataean king: if this is the case then it would seem to indicate that the Nabataean king ruled Teima.\footnote{Ibid., 183.} Similarly, inscriptions at Dumata indicate that this site also was garrisoned by the Nabataeans. An inscription in Nabataean dating from A.D. 44 mentions one Ganimu, who was commander (\textit{RB MSRYT'}) at Dumata, showing clearly that the Nabataeans maintained some kind of military presence there.\footnote{R. Savignac \& J. Starcky “Une inscription nabateenne provenant du Djof” \textit{RBibl} 64 (1957), 215; G.W. Bowersock \textit{Roman Arabia}, 154-159.} These facts indicate that both these sites were of importance to the Nabataeans, and the reason for that importance may well have been their significance as the points at which the Gerrhaean incense caravans entered the Nabataean realm.

\textit{Leuke Kome}

Another route by which the incense came to Petra was through the port of Leuke Kome, which has not been located although it was probably at the mouth of the Gulf of ‘Aqaba at ‘Aynunah.\footnote{L. Kirwan “Where to Search for the Ancient Port of Leuke Kome” \textit{Second International Symposium on the History of Arabia: Pre-Islamic Arabia} (Riyadh 1979), 7.} This port was probably constructed in order to gain some of the trade which was passing up the Red Sea even in pre-Roman times, perhaps as an alternative to the Egyptian ports which were possibly already taking some of the Arabian incense trade and diverting it away from Petra.\footnote{Groom suggests that the vast majority of the trade was carried overland and that the...} However, Groom suggests that the vast majority of the trade was carried overland and that the
Nabataeans would have been unlikely to have built a port which would compete with the overland trade. This view fails to take into account the clear statements in the *Periplus* which relate that considerable quantities of frankincense were traded by sea from the South Arabian ports of Kanê and Moscha Limen, as well as myrrh from Muza. Such seaborne trade would have been lost to the Nabataean kingdom, as it would have been carried directly to Egypt. The most likely explanation for the construction of Leuke Kome would be as a response to the appearance of this trade: Leuke Kome would redirect to the Nabataean kingdom trade which would otherwise have been lost to Egyptian ports. In any case, by the time of Aelius Gallus’ expedition in 25 B.C., Leuke Kome had become a busy center of trade, an *εμπόριον μέγα* according to Strabo, from which large caravans carried aromatics up to Petra:

... εἰς τὴν Λευκὴν καύμην, εἰς ἄν, καὶ ἐξ ἓς οἱ καμηλεμποροὶ τοσούτῳ πλήθει ἀνδρῶν καὶ καμηλῶν ἔδευσαν ἀσφαλῶς καὶ εὐπόρως εἰς Πέτραν καὶ ἐκ Πέτρας, ὡστε μὴ διαφέρειν μηδὲν στρατοπέδου.

...to Leuke Kome, to which and from which the cameltraders travel in safety and ease to and from Petra in such great numbers of men and camels that they do not differ in anything from an army.

It would appear from this that the Nabataeans’ attempt to gain some of the seaborne traffic in the Red Sea for themselves was, at this early stage at least, largely successful. While it remains to be seen whether or not the appearance of ports such as Leuke Kome and the Egyptian Red Sea ports caused a decline or even the disappearance of the overland route, as has been suggested, it cannot be denied that at various times the incense trade was significant both on the overland route and by

30 N. Groom *Frankincense and Myrrh*, 207.
31 For Muza see *Periplus* 21, 24; for Kanê, 27-28; for Moscha Limen, 32.
sea. Astute traders, such as the Nabataeans seem to have been, would not miss an opportunity to keep, or even to further expand, their trade, and accordingly when seaborne trade began to pick up in the first century B.C. they established the port of Leuke Kome on their territory in order to secure for themselves at least a portion of that trade.

The *Periplus* contains a well-known passage about Leuke Kome which deserves attention, as it has been the occasion of considerable scholarly debate. This debate centres on the identity of a centurion and an officer charged with collecting the import duty at Leuke Kome, and specifically as to whether they were Roman or Nabataean officers.\(^34\) The passage describes Leuke Kome as a port of trade mainly for smaller Arab boats (presumably as opposed to the larger Greek vessels which would travel to the Egyptian ports)\(^35\), but nonetheless it testifies to Leuke Kome's continued importance as a port of trade in the first century A.D.:

... δὲ λέγεται Λευκὴ κῶμη, δι᾽ ἓς ἐστὶν εἰς Πέτραν πρὸς Μαλίχαν, βασιλέα Ναβαταῖων, ἀνάβασις. ἔχει δὲ ἐμπορίον τινὰ καὶ αὐτὴ τἀξιν τοῖς ἀπὸ τῆς Ἀραβίας ἐξαρτιζομένοις εἰς αὐτὴν πλοῖοι οὐ μεγάλοισ. διὸ καὶ παραφυλακῆς χάριν καὶ εἰς αὐτὴν παραλήπτης τῆς τετάρτης τῶν ἐξαρτιζομένων φορτίων καὶ ἐκατοντάρχῃς μετὰ στρατεύματος ἀποστελλέται.

... which is called Leuke Kome, from which there is a road to Petra, to Malichus the king of the Nabataeans. It acts as a market to the small ships which come to it loaded with freight from Arabia. Because of this as a guard a customs officer for the 25% tax on incoming goods is despatched there, and also a centurion with a garrison.\(^36\)

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\(^32\) Strabo *Geog.* XVI. 4. 23

\(^33\) P. Crone *Meccan Trade and the Rise of Islam*, 23.

\(^34\) For the bibliography of this debate up until 1978 see Raschke “New Studies in Roman Commerce with the East”, 982. Since then, G.W. Bowersock *Roman Arabia*, 70 and Casson *The Periplus Maris Erythraei*, 145 have supported the view that the officers were Nabataean while Sidebotham *Roman Economic Policy in the Erythra Thalassa*, 106-107 states that they could be either Nabataean or Roman.

\(^35\) The fact that Leuke Kome was not normally used by Roman vessels is further confirmed by the absence of the *Periplus* writer's usual list of imports and exports for a port of trade: clearly Leuke Kome would not be of interest to a likely reader of the *Periplus*, and so these details are left out.

\(^36\) *Periplus* 19
The term παραλήπτης is elsewhere attested of both Roman and Ptolemaic officials, and ἐκατοντάρχης is the usual Greek equivalent for the Roman rank of centurion. However, it has also been pointed out that centurion was a rank in the Nabataean army, as is attested by an epitaph on one of the tombs at Medain Saleh where the Latin title centurio is transliterated into the Nabataean QNTRYN. Thus it is altogether possible that the officers mentioned in the *Periplus* could be Nabataean rather than Roman, although Raschke suggests, citing other instances of Roman troops being posted within the territory of client kingdoms, that the officers were Roman, tasked with collecting the 25% import duty and thus ensuring that Roman vessels did not avoid the tax by going to Leuke Kome instead of Berenike or Myos Hormos. This theory is attractive, and seems to accord well with the *Periplus*’ description of the customs-collector as a παραφυλακή, which would otherwise seem a fairly unusual term. One might expect such a word to describe the centurion and his cohort, but in the text it seems to apply to the customs-collector. This then begs the question of what exactly it was that the customs-collector was guarding against. If Raschke’s view is accepted, the answer is supplied: he was guarding against the evasion of the τετάρτη (25% import duty) at the Roman ports of Berenike and Myos Hormos. If there had not been such a collector at Leuke Kome as well as in Egypt, ships might well have evaded this heavy impost by offloading their cargoes at Leuke Kome.

It should also be noted that it would appear very unsound for the Nabataean kingdom to have charged the τετάρτη, as this would presumably mean that any goods

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37 G.W. Bowersock *Roman Arabia*, 71.
38 *CIS* II. 1. 217
39 M.G. Raschke “New Studies in Roman Commerce with the East”, 664.
being taken through the Nabataean kingdom and thence into the Roman Empire (which
would most likely have been the vast bulk of the goods) would have had to pay the
τετάρτη twice, once at Leuke Kome to the Nabataeans and then at the port of entry
into Roman territory (probably Gaza) to the Romans. It would thus have been
suicidal for the Nabataeans to have charged this tax, as this would divert all of their
trade very rapidly to Egypt, where the τετάρτη only had to be paid once.40

Whatever the answer to this particular question might be, these passages
certainly show that Leuke Kome was an important port of trade and that international
commerce used the port to the extent that it was necessary to send a tax-collector
there. While there may be some questions remaining about the administration and
ownership of the port, it is beyond doubt that the reason it was constructed and
maintained was as an emporium for the aromatics trade, and as such it represented an
alternative to the overland route from South Arabia, and perhaps also an alternative
for seaborne traffic to the Egyptian Red Sea ports.

These then were the sources of the incense which the Nabataeans then carried
to the markets of the Roman world, and from which their wealth appears to have been
largely derived: the overland routes from South Arabia on the one hand and Gerrha on
the other, and some seaborne traffic through the port of Leuke Kome. The relative
proportions of traffic, or indeed the overall volume of the trade, are impossible to
determine but the prominence afforded them by the ancient authors and the high value
of the goods as described in the introduction clearly demonstrate that the trade was of
considerable importance.

40 G.K. Young “The Customs-collector at the Nabataean Port of Leuke Kome”, 267.
The Routes to the Mediterranean

From Petra the incense was then carried by road to Gaza and Rhinocolura on the Mediterranean. This road is attested by Pliny\textsuperscript{41} and has been excavated at several locations, but it, like Leuke Kome, has been the occasion of much scholarly debate. This debate centres chiefly on whether or not the road passed out of use or at least declined in use during the first century A.D., and it will be dealt with in the discussion of the effects of the coming of the Romans upon the Nabataean kingdom which follows. What is known, however, is that during the period before the Romans made their presence felt in the area, and for quite some considerable time after that, the roads between Petra and the Mediterranean were reckoned of sufficient importance to warrant garrisons, watchtowers and other fortifications, all of which have been found along the route.\textsuperscript{42} These stations and towers seem to have initially built by the Nabataeans and later improved by the Romans, and maintained by them until at least the Severan period.\textsuperscript{43} Thus it is clear that these Mediterranean ports were considered to be of great significance by the Nabataeans, and the protection of traffic along the routes leading to them was of sufficient importance to warrant considerable military investment.

\textsuperscript{41} Pliny \textit{NH} VI. 32

\textsuperscript{42} F. Frank "Aus der 'Araba I" \textit{ZDPV} 57 (1934), 191-280; A. Alt "Aus der 'Araba II-IV" \textit{ZDPV} 58 (1935), 1-78; A. Negev "The Date of the Petra - Gaza Road"; Z. Meshel \& Y. Tsafrir "The Nabataean Road from Avdat to Sha'ar Raman I" \textit{PEQ} 106 (1974), 103-118; Z. Meshel \& Y. Tsafrir "The Nabataean Road from Avdat to Sha'ar Raman II" \textit{PEQ} 107 (1975), 3-21; R. Cohen "New Light on the date of the Petra - Gaza Road".

\textsuperscript{43} R. Cohen "New Light on the date of the Petra - Gaza Road", 246.
From these ports the aromatics may well have been shipped straight to Rome and to other parts of the Empire, but Pliny indicates that much of the incense was worked up for sale at Alexandria:

at, Hercules, Alexandriæ, ubi tura interpolantur, nulla satis custodit diligentia officinas.

But, by Hercules, at Alexandria, where the frankincense is prepared, no diligence is enough for guarding the workshops.⁴⁴

While this passage may refer to incense brought to Alexandria via the Egyptian Red Sea ports, Pliny does mention it just before describing the overland commerce from South Arabia and thus it is likely that he is referring to at least some of the frankincense being brought from Petra to Alexandria and then being shipped to Rome after being worked up for sale at Alexandria.

⁴⁴ Pliny *NH* XII. 32
MAP III. 2 THE NABATAEAN KINGDOM

Showing major internal caravan tracks
In support of this possibility, recent research by Fawzi Zayadine has shown that there indeed were several routes which crossed the Sinai peninsula, and which thus could have been used to transport the incense direct from either Aqaba or Petra to Alexandria.\(^\text{45}\) Several of these routes in fact show archaeological evidence of Nabataean traffic. Nabataean graffiti have been found in the Wadi Urnm Sidreh and the Wadi Taba, both on the ancient road between ‘Aqaba and Suez, showing that Nabataean traffic passed this way.\(^\text{46}\) It is therefore entirely possible that in addition to the traffic which crossed the Negev direct to Gaza, there was also an appreciable amount of trade which was carried from the Nabataean kingdom into Egypt and from there to the markets of the Empire.

There is also evidence that traders from South Arabia used the path of the later Via Nova Traiana from Aila through Petra and then North toward Bostra and Damascus. In describing the territory around Damascus, Strabo relates an account of merchants from Arabia Felix being attacked by brigands in the Ituraean mountains:

\[\text{έπειτα πρὸς τα Ἀράβων μέρη καὶ τῶν Ἰτούρας ἰδρύμενοι ἔρη διάθατα, ἐν οἷς καὶ σπηλαια βαθύτατα, ὡς ἐν καὶ τετράκυκλοις ἀνθρώποις δέδοσαν δύσμενον ἐν κατάραμασι, ἀπὸ τῶν Ἰτούρακτων γίνονται πολλαχόθεν, τὸ μέντοι πλέον τοὺς ἀπὸ τῆς εἰκαλίμους Ἀραβίας ἐμπόρος λεηλατούσιν οἱ βárβαροι.}\]

Then towards the parts inhabited by Arabs and Ituraeans mixed together there are difficult mountains, in which there are deep-mouthed caves, one of which is able to receive four thousand people in a raid, which are made against the Damascenes from many places. Indeed for the most part the barbarians were robbing the merchants from Arabia Felix.\(^\text{47}\)

Merchants from Arabia Felix who were in this area, that is in Ituraea south of Damascus, can only have come through Petra along the road which later came to be

called the *Via Nova*. This provides evidence that this route was in use in the Nabataean period, well before the Romans took over in A.D. 106 and commenced the construction of their road. This is further confirmed by the fact that the road is equipped with forts and roadstations along at least the southern part of its route which have been dated on the basis of pottery samples to the Nabataean period.\(^{48}\) It is clear then that the *Via Nova* was no Roman innovation, but rather a Roman re-use of an already existing Nabataean caravan track.\(^{49}\) While much of the trade coming through Petra would probably have continued to use the path from Petra to Gaza, it is apparent that at least some traffic instead opted to travel north on this road toward Bostra. From there it was presumably carried to the Mediterranean at such ports as Tyre or Caesarea Maritima, and then shipped to Rome, either directly or through Alexandria. As will be noted in the next section, this traffic may well have increased in the course of the first century A.D. as the northern part of the kingdom around Bostra gained in importance. In any case, the use of this route as an artery of trade for at least some traffic in the Nabataean period seems established.

**Conclusion**

At the beginning of the period under discussion Petra was clearly a very significant place in terms of the trade in aromatics from the Arabian peninsula. As has been shown, frankincense and myrrh were brought there along many routes, ranging

\(^{46}\) Ibid., 159-162.  
\(^{47}\) Strabo *Geog.* XVI. 2. 20  
from the 'incense road' from southern Arabia and the trans-Arabian route from Gerrha to the road from the Red Sea port of Leuke Kome. The advantageous situation of Petra at the junction of these routes from Arabia with those that reached the Mediterranean gave the Nabataeans the opportunity to exploit the caravan trade and to grow rich. The increasing demand for goods brought about by the establishment of peace in the Roman Empire must have brought new markets and new commercial opportunities to the merchants of the Nabataean realm, but with the Romans came also competition from the ports of the Egyptian Red Sea coast, and also the possibility of direct Roman military interference to establish their own trade to the detriment of the Nabataeans.

These possibilities exist because the routes through the Nabataean realm were not the only paths by which Arabian incense could reach the markets of the Roman Empire. The Ptolemies had already started to build up their trade through the Red Sea ports with India, which also offered the opportunity to reach the incense producing region of Arabia by sea. As has been discussed in the previous chapter, the Romans expanded this trade and provided ports, roads and protection to the merchants using the Red Sea route. In addition, they conducted some aggressive military campaigns in the area. How then did these changes affect the prosperity of the Nabataeans, or the commerce upon which much of that prosperity depended?

III.2 The Nabataean Aromatics Trade in the First Century A.D.

There has long been a view that there was a decline in the fortunes of the Nabataean kingdom in the course of the first century A.D., brought about by the loss
of their trade in aromatics. This trade is envisaged as being redirected, either deliberately or as a result of market forces, to the Egyptian Red Sea ports of Berenike and Myos Hormos. This would indeed seem to be confirmed by Strabo, who states that the aromatics formerly brought to Leuke Kome (and thus through Petra) had by his time for the most part been redirected through Myos Hormos:

Strabo Geog. XVI. 4. 24

The loads then are carried from Leuke Kome to Petra, and from there to Rhinocolura in Phoenicia near to Egypt, and from there to other places. But now the majority is brought to Alexandria by the Nile, being brought down to Myos Hormos from Arabia and India. 50

It would certainly seem by this that at least some trade was lost by the Nabataean kingdom to those shippers who were using the Egyptian Red Sea ports, and thus there is a prima facie case for a Nabataean decline in the first century A.D.

Avraham Negev and others have added to this piece of literary evidence some further archaeological and numismatic evidence and thus constructed a picture of a Nabataean decline in the first century A.D. caused by the diversion of the aromatics trade to Egypt. This is envisaged as taking place due to both the cheaper cost of sea transport and the deliberate policy of the Roman administration. 51 The archaeological evidence adduced in support of this consists chiefly of surface surveys of the roads between Petra and the Mediterranean ports and excavations at such towns in the Negev as Oboda and Mampsis. These surveys appeared to show a lack of activity on the road past the middle of the first century A.D. as well as the destruction of the

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50 Strabo Geog. XVI. 4. 24
towns, presumably by nomadic tribes, at about the same time.\textsuperscript{52} This was further supported by the evidence from Nabataean silver coinage, which shows a gradual decline in silver content during the first century A.D., until it fell to approximately 20\% during the later years of Malchus II and the entire reign of Rabbel II.\textsuperscript{53} This decline, Negev argues, was caused by a decline in prosperity, itself caused by the loss of the aromatics trade, combined with the effects of nomadic disturbances in the middle of the first century. This loss of revenue was partly redressed by the colonisation of the Hauran and the increasing importance of Bostra at the expense of Petra, combined with a new emphasis on intensive agriculture which replaced trade as the basis of the Nabataean economy in the period leading up to the Roman annexation in A.D. 106.\textsuperscript{54} The actual cessation of the trade Negev places at A.D. 7, based upon a sharp decline in the silver content of Nabataean coins at that particular date.\textsuperscript{55} Many scholars both before and after Negev have taken the view that this decline in trade was caused by a deliberate act of Roman policy, designed to alter the balance of trade back to more favourable terms for Rome, and to eliminate the Arabs, both Sabaean and Nabataean, as ‘middlemen’ in the commerce.\textsuperscript{56} This policy, it is argued, was

\textsuperscript{52} A. Negev “The Date of the Petra - Gaza Road”, 89-98; A. Negev “The Nabataeans and the Provincia Arabia”, 620-634.
\textsuperscript{53} Y. Meshorer \textit{Nabataean Coins} (Jerusalem 1975), 73-74; A. Negev “Numismatics and Nabataean Chronology”, 122-124.
\textsuperscript{54} A. Negev “The Nabataeans and the Provincia Arabia”, 639.
\textsuperscript{55} A. Negev “Numismatics and Nabataean Chronology”, 126.
accomplished by the systematic encouragement of the commerce in Egypt, as well as the destruction of the influence of the Sabaeans and Nabataeans by military means.

Roman Military Action and Nabataean Trade

In view of this thesis, then, the possibility of Roman military intervention to deliberately destroy Arabian influence and participation in the spice and incense trades should be examined. Probably the best known of the Roman military adventures in Arabia is the expedition of Aelius Gallus, who at the time was prefect of Egypt, shortly after the accession of Augustus. This expedition has often been taken as proof of a Roman intention to redirect trade flowing through Arabia by means of military action.

The actual expedition took the form of the construction of a massive armada at Cleopatris in Egypt, which then sailed to Leuke Kome under the direction of Gallus, guided by Syllaeus, the vizier of the Nabataean king. From Leuke Kome the expedition marched southwards into Arabia Felix, where it assaulted several towns and captured all but one, the capital Marsaiba. Lack of water and the prevalence of disease forced the abandonment of the expedition at this point, upon which the remnants of the force returned to Egypt through Myos Hormos. Strabo blamed the failure of the expedition on the treachery of Syllaeus, but in fact the likely cause of the

failure was poor military intelligence, causing a failure to plan and prepare adequately for such an arduous campaign.\textsuperscript{58}

Many scholars have suggested that the chief purpose of this expedition was to control the transit traffic from India which passed through Eudaimon Arabia, or to control the output of Arabian incense from the region.\textsuperscript{59} These reconstructions assume that the expedition was made with far-sighted economic motives, which might possibly have included the control of the spice-trade routes in order to redirect them to Egypt, so weakening the South Arabian ‘middleman’; the weakening of the Nabataean kingdom which, as we have already seen, gained a great deal of its trade from Arabia Felix; and finally increasing the trade passing through the Red Sea ports of Egypt.

However, these conclusions are quite unjustified. Any transit trade that Eudaimon Arabia possessed had already ceased as soon as the ships of Greek and Roman Egypt began to make the direct sailing to India, obviating the need for a transfer of cargoes in Arabia.\textsuperscript{60} Thus, we can safely disregard any attempt to remove South Arabian ‘middlemen’ from the trade, for if the South Arabians had ever held an exploitative monopoly over the India trade, it was long gone by the time of Gallus. Similarly, there is no need to assume that the Romans were attempting to gain any ‘control’ over the incense trade from Arabia either. Indeed, Strabo himself makes it

\textsuperscript{58} P. Mayerson “Aelius Gallus at Cleopatris (Suez) and on the Red Sea” \textit{GRBS} 36 (1995), 17-24.
\textsuperscript{60} I. 5 above. See \textit{Periplus} 26, which states clearly that the transit trade ceased as soon as the direct crossing to India became common. That the monsoon passage was in fact commonly used in Gallus’
perfectly clear that Augustus desired to conquer Arabia Felix simply to annex the territory and to seize its proverbial wealth. Thus, we should only view the expedition of Aelius Gallus as economically motivated in the most basic sense: the intention was to seize the wealth of the region in order to enrich the Roman treasury. As far as any intention to control the incense trade, or to direct it to Egypt rather than the Nabataean kingdom, is concerned, there is simply no evidence to justify such a conclusion. As will be seen, there was no good reason for the Romans to want to destroy the trade of the Nabataeans, and there is similarly no good reason to suppose that the expedition of Gallus was such an attempt.

The expedition of Aelius Gallus should therefore be rejected as a commercially motivated campaign. Nonetheless, there are other events in Arabia in the first century A.D. which have occasionally been suggested as possible attempts to influence the course of the trade by means of direct military intervention. Gaius Caesar seems to have campaigned in Arabia in the course of his expedition to the East in A.D. 1-3. Pliny mentions a brief campaign near the "Arabian Gulf" (Gulf of 'Aqaba) prior to Gaius' better attested expedition to Armenia. Pliny describes this in the following terms:

\[
\text{. . . in Arabicum sinum, in quo res gerente C. Caesare Augusti filio signa nauium ex Hispaniensibus naufragiis feruntur agnita.}
\]

\[
\text{. . . in the Arabian gulf, in which it is said that when Gaius Caesar, the son of Augustus, was campaigning there, the standards from Spanish shipwrecks were identified.}\]

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61 Strabo Geog. XVI. 4. 22
62 Pliny NH II. 67
The campaign here mentioned is sometimes suggested as having been an attempt to dominate or control the Arabian trade routes, specifically those by which incense was transported into the Empire.\(^63\) This view, however, lacks any support, particularly given the dearth of any evidence by which we might reconstruct the motives for the expedition. In his other mention of the expedition, Pliny tells us that Gaius did not actually penetrate into Arabia, but only remained near the Gulf of 'Aqaba:

> Romana arma solus in eam terram adhuc intulit Aelius Gallus ex equestri ordine; nam C. Caesar Augusti filius prospexit tantum Arabiam.

Aelius Gallus of the equestrian order alone has brought Roman arms into this territory, for Gaius Caesar the son of Augustus only glimpsed Arabia.\(^64\)

Thus, Gaius' campaign was only a brief one which did not penetrate into Arabia at all, and it is therefore impossible to attribute any commercial motives to it, even if it could be shown that the Romans would wage war for such reasons. By far the most likely possibility is that Gaius campaigned against nomadic tribes on the fringe of the Nabataean kingdom, perhaps because they were threatening the stability of the kingdom or otherwise raiding the settled area.\(^65\) In any case, there is absolutely no valid reason to suppose that this expedition had anything to do with the control of the spice or incense routes.

Another event which has aroused interest in this respect is the apparent destruction by the Romans of the port of Eudaimon Arabia (Aden), on the southern coast of the Arabian peninsula. In describing this port, the author of the *Periplus Maris Erythraei* states that:

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\(^63\) J.I. Miller *Spice Trade*, 15; J.R. Thorley "The Development of Trade between the Roman Empire and the East under Augustus", 212-213.

\(^64\) Pliny *NH* VI. 32
But now, not long before our own time, Caesar destroyed it.  

This passage has aroused a great deal of controversy, as there is no known Roman campaign which would answer to this description. Several possible candidates have been suggested, including Aelius Gallus, Gaius Caesar, Claudius, Nero and even Septimius Severus, but none of these are without their problems and some are downright impossible. Despite this, many have suggested that this passage is evidence that the Romans destroyed Aden in order to prevent Arabian 'middlemen' from dominating the trade through the Red Sea, and to allow their own ships sailing to Egypt to take over the spice and incense trade.

This, however, overlooks the fact that in the same passage the *Periplus* indeed does mention the reason that Eudaimon Arabia had lost its trade, and that this reason had nothing to do with the attack by 'Caesar'. As has already been noted in connection with the expedition of Aelius Gallus, the *Periplus* states that trade had ceased to flow through Eudaimon Arabia because ships ceased to call there after they began to sail from Egypt to India directly. Thus, it was the discovery of the use of the monsoon by the traders who used the Red Sea which spelt the end of Aden’s

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66 *Periplus* 26
67 For a discussion of these suggested dates see M.G. Raschke "New Studies in Roman Commerce with the East", 647 with notes. Briefly, Aelius Gallus’ expedition did not reach Aden, and was too far in the past in the mid-first century A.D. to be called “in our own time”; Gaius Caesar, as noted above, did not campaign in Arabia proper but only near to the Gulf of ‘Aqaba; Claudius and Nero lack any Imperial salutations or indeed any other evidence to suggest they embarked on such expeditions; and the case for Septimius Severus rests upon a third-century date for the *Periplus* which must itself be rejected (See I. 4 above).
69 *Periplus* 26
significance as a port, and not any commercially-motivated Roman attack.\(^\text{70}\) It is clear that, even if there was a Roman attack on Aden, it could not have been motivated by the desire to 'cut out the middleman' because if there indeed ever had been any middlemen in Aden, they had already been 'cut out' by the exploitation of the monsoon by Greek and Roman traders. Accordingly, the statement by the author of the *Periplus* that Caesar attacked Eudaimon Arabia is no proof of a commercially-motivated Roman foreign policy.

The most likely explanation for this passage would be a garbled local memory of the expedition of Aelius Gallus, which entered the country (not the city) called Eudaimon Arabia, which was then later confused with the decline or destruction of the town by other hands.\(^\text{71}\) Nonetheless, whatever the explanation for this passage, it is clear that it was not an attack caused by commercial considerations, and is no evidence for a Roman desire to eliminate Arabian participation in the spice or incense trades.

Thus there is no evidence in either the expedition of Aelius Gallus, the campaigns of Gaius Caesar or the alleged Roman attack on Aden whereby we might discern a desire on the part of the Romans to eliminate the influence of the Sabaeans or Nabataeans on the Arabian incense trade or indeed on the Indian spice trade. Accordingly, if we are to postulate any kind of Roman interest in moulding the trade routes to suit their own interests, we must direct our enquiries away from direct military action.

\(^{70}\) L. Casson *The Periplus Maris Erythraei*, 160.
The Likelihood of Deliberate Roman Economic Pressure

Although we can thus safely say that there is no evidence for direct military intervention to redirect the incense trade to the Red Sea route, there remains the possibility that the Romans used more indirect means to accomplish the same end. The encouragement of the Egyptian Red Sea trade and the alleged consequent decline of the Nabataean kingdom has often been seen as a deliberate act of the Roman administration designed to squeeze out an economic rival (i.e. the Nabataean kingdom), and to support Roman trade. As has been noted, this view takes the opinion that the Romans desired to eliminate the Nabataeans because they saw them as 'middlemen' who monopolised and exploited the trade to the detriment of Rome’s economy. As with all areas of the eastern long-distance trade, however, the 'middlemen' with whom so many scholars seem to be fascinated prove ephemeral.\textsuperscript{72} In fact, an examination of the surviving evidence reveals that the vast majority of the trade had always been in the hands of Roman subjects or clients, be they Nabataeans, Palmyrenes or Alexandrian Greeks: thus the 'middlemen' had always been Roman.\textsuperscript{73} It is therefore quite unlikely that any attempt would be made by the Roman authorities to remove them, and difficult to see what economic gain for the Empire could be made by such an action.

This is certainly the case with Petra: the Nabataean kingdom had long been a vassal of the Romans, and there is no good reason why the Romans would have wanted to exclude them from the commerce. It is not as though the Romans would necessarily lose any revenue by allowing the Nabataeans to continue in their trade:

\textsuperscript{72} M.G. Raschke “New Studies in Roman Commerce with the East”, 645-647.

250
Pliny mentions that Roman taxes had to be paid on the goods coming over the ‘incense road’ when they arrived at Gaza anyway, and one assumes that the Romans could set the taxes at any level they chose. This is particularly the case if one accepts that the tax-collector at Leuke Kome was Roman: thus, if a ship carrying spices or incense went to Leuke Kome instead of to one of the Egyptian ports, the Romans would still collect the τετάρτη. In this case then the revenue accrued to Rome would be the same, regardless of the presence or absence of Nabataean ‘middlemen’. This fact applies equally whether the trade was in the hands of private individuals or was a monopoly of the Nabataean government, so even if the Nabataean kings had rigidly controlled all the trade that passed through their realm there is still no disadvantage to Rome which can be identified. Also, the mere existence of the alternative route via Egypt would have ensured that the Nabataeans could not artificially inflate the price of the incense to the detriment of the Romans who purchased it, as the same goods would also be available from non-Nabataean merchants in Alexandria. Market forces would thus ensure that any merchant or group of merchants who inflated their prices would soon be driven out of business. There is no reason to suppose that the Romans preferred to enrich Alexandrian merchants rather than Nabataean ones, and nothing so far as we know to prevent Roman merchants operating within the Nabataean kingdom, and so participating in the profits of their trade, if they so desired. No Roman client king would be in a position to try and exclude Romans from his realm: all available evidence shows that Roman

73 Ibid.
74 Pliny NH XII. 32
75 It should also be noted that there is no evidence for such a government monopoly on the trade in the Nabataean kingdom. See III. 3 below.
merchants and bankers operated freely throughout all areas of Roman influence. Indeed, Strabo refers to the presence of Romans at Petra, and some of these could certainly have been merchants.\textsuperscript{76}

With these things in mind, it is difficult to see what advantage there could have been to the Roman administration in taking the trade off the Nabataeans and redirecting it to Egypt. All that would be accomplished by such a move would be to weaken and destabilize a client kingdom which generally had good relations with Rome and contributed to Roman military requirements in the area.\textsuperscript{77} If the Romans had wished to weaken the kingdom they had no need to resort to economic measures; they had more than enough military power to annex it outright with little difficulty, which indeed they did in A.D. 106. It is thus clear that we can safely reject the idea that the Romans might have resorted to economic pressure tactics in order to weaken the Nabataean kingdom. There is no identifiable advantage to the Romans in destabilizing the kingdom in this way, and no evidence that the Romans ever resorted to such economic measures to achieve policy ends even if they had possessed a sound reason for doing so.

\textsuperscript{76} Strabo \textit{Geog.} XVI. 4. 21

\textsuperscript{77} The Nabataeans sent troops to support Gallus’ expedition (Strabo \textit{Geog.} XVI. 1. 22) and against the Jewish revolt in A.D. 70 (Josephus \textit{BJ} III. 68). There were of course some difficulties with the relationship, such as disputes over the accession of Aretas IV (Josephus \textit{AJ} XVI. 294-298) and a war between Aretas and Herod Antipas (Josephus \textit{AJ} XVIII. 109-125), but generally speaking the relationship was good. Indeed, Tiberius’ instruction to the governor of Syria when he ordered him to make war on Aretas (due to Aretas’ attack on Herod Antipas) shows what the Roman action would have been had the kingdom adversely affected Roman interests: conquest and annexation (Josephus \textit{AJ} XVIII. 115).
The Effect of Egyptian Trade on the Commerce of the Nabataean Kingdom

Despite the fact that the weakening of the Nabataean kingdom by deliberate Roman policy can safely be rejected, there still remains the statement of Strabo discussed earlier that the trade which formerly passed through Leuke Kome generally went through Myos Hormos at the time he was writing.\(^78\) There thus remains the possibility that, even if there was no deliberate intention to destroy Nabataean trade, the rise in importance of the Egyptian Red Sea ports caused a corresponding, though unintended, decline in trade passing through the Nabataean kingdom.

With reference to Strabo's remark concerning Leuke Kome, however, it should first be noted that he was only referring to seaborne trade going through Leuke Kome itself, not to the whole aromatics trade including the overland routes. It is only modern writers who hold that the overland trade was completely supplanted by sea traffic,\(^79\) and the incorrectness of this view will be discussed shortly. Thus, while ships may have been attracted to Berenike and Myos Hormos instead of Leuke Kome by the facilities available at the former ports (and perhaps by the fact that Roman taxes alone may have been cheaper than Roman and Nabataean taxes combined), such considerations do not necessarily apply to the overland caravan trade. Strabo's statement that traffic using Leuke Kome had decreased cannot be turned into a proof of a general decline in Nabataean fortunes, as he says nothing about any corresponding decline in the overland trade coming up the 'incense road' or across the Arabian peninsula from Gerrha.

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\(^78\) Strabo Geog. XVI. 4. 24  
\(^79\) P. Crone Meccan Trade and the Rise of Islam, 23.
Such opinions must also take into consideration the fact that trade *did* continue, at least to some extent, into Leuke Kome. The *Periplus*, as has already been noted, refers to smaller Arab vessels using the port and the fact that there was a garrison and a customs-collector there.\footnote{Periplus 19} As the date of the *Periplus* is now generally agreed to be mid first century A.D.,\footnote{See I. 2 above.} and thus some fifty years after the time of Strabo, this reference shows that Leuke Kome did not pass out of use, only that there had been some reduction in the proportion of trade using the port. It was still clearly in use, and moreover in enough use to require and justify the posting of a body of troops and a customs-collector at the location. While its significance may have declined from the first century B.C., Leuke Kome was certainly no ghost town by the time of the writing of the *Periplus*.

In addition, against Strabo’s comment that “most” of the trade now went through Myos Hormos must be placed the fact, discussed previously, that he also tells us that there had been a vast *increase* in the overall volume of trade at this time. In his description of Egypt, Strabo pointed out that the number of ships sailing from the Red Sea ports to India (and therefore also via South Arabia *en route*) had vastly increased since the establishment of Roman administration:

\[
\text{πρώτερον μὲν γε οὐδὲ εἴκοσι πλοία ἐθάρρει τῶν Ἀράβων κόλπων διαπερᾶν, ὡστε ἐξ ὁ τῶν στενῶν ὑπερκύπτειν, νῦν δὲ καὶ στόλοι μεγάλοι στέλλονται μέχρι τῆς Ἰνδικῆς καὶ τῶν ἄκρων τῶν Αἰθιοπικῶν . . . .}
\]

While formerly not twenty ships were confident to pass through the Arabian gulf so that they crept outside the straits, now even great fleets are sent as far as India and the ends of Ethiopia . . . \footnote{Strabo Geog. XVII. 1. 13}
Thus it can be seen that any decline in the proportion of the aromatics trade passing through Leuke Kome must be weighed against the fact that the overall volume of the trade had increased markedly. It may be that the trade at Leuke Kome had reduced somewhat due to shippers preferring to use the Egyptian ports, but it is equally clear that some trade continued to use the port. It was also, moreover, of sufficient volume to warrant the stationing of a garrison and a customs-collector. In any case, it has been seen that the trade of Leuke Kome was far from the only source of Nabataean commerce and wealth. Accordingly, any attempt to postulate a decline in the Nabataean kingdom based on Strabo’s remark alone rests upon a very shaky foundation and should thus be rejected.

The Continued Existence of Land-Based Commerce in the First Century

Much of the trade that came through Petra appears to have been from the land routes, and this continued to be the case even after the construction of Leuke Kome and the expansion of the sea trade into Egypt. It is certainly the case that seaborne traffic increased in prominence throughout the first century A.D., probably due to the lower expense of seaborne traffic generally, but there is no evidence to suggest that there ever had been a complete monopoly by Nabataean (primarily land-based) transport, nor a seaborne monopoly that replaced it. The monopolies enjoyed by ‘middlemen’ which seem so beloved of many scholars of the spice trade are largely ephemeral. The apparent monopoly of Pliny’s Gebbanitae (whoever they may have
been) over the frankincense trade has already been noted, but any such monopoly would appear only to extend to the trade from the interior: Pliny also mentions frankincense being shipped from the South Arabian ports of Kanē and Muza, and the *Periplus* states that the king of the "Frankincense-Bearing Land" (Hadramaut) caused all frankincense grown in his territory to be shipped through the ports of Kanē and Moscha Limen. It would thus appear, from the primary sources at least, that seaborne traffic through Egypt existed at the same time as overland and seaborne (i.e. through Leuke Kome) traffic through the Nabataean kingdom, and any monopolies that were in place appear to have only been local in nature.

To reconcile these two sources of the product and still maintain the idea of a collapse of the land based incense traffic through Arabia, Patricia Crone envisages a land-based monopoly in the time of Juba (Pliny's source) giving way to seaborne traffic by the time the *Periplus* was written in the mid first century A.D. However, this view is not tenable because Pliny records both seaborne and land-based traffic, while the *Periplus* speaks only of frankincense grown within the borders of one particular kingdom, not of all the frankincense grown in Arabia. In establishing her thesis that the trade on the 'incense road' completely disappeared in the first century A.D., Crone has taken comments in primary sources which refer merely to local monopolies and attempted to apply them to the entire incense trade. However, as has been seen, the mutually contradictory nature of these primary references show clearly that they do not refer to universal monopolies but only to local areas. Thus it would

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83 III. 1 above.
84 Pliny *NH* VI. 26
85 *Periplus* 27, 31
86 P. Crone *Meccan Trade and the Rise of Islam*, 18-23
seem that the land-based and seaborne commerce existed side-by-side, and that any monopolies which existed were only over a specific local area, and did not cover the whole trade in any given commodity.

In addition, the continued use and military occupation of the site of Medain Saleh in the Hejaz shows that the overland incense traffic did not disappear in the first century A.D., but rather maintained its vitality for at least that period. As was mentioned earlier, the centre of Medain Saleh was inhabited at least from A.D. 1 - A.D. 75, as attested by the epitaphs on the tombs there. Although it has been suggested that Medain Saleh had a military purpose apart from its commercial role, it is difficult to see why there should have been a station at such extreme depth in the desert if it were not an important station on the incense road from southern Arabia. If the Nabataean kingdom had not had interests in that area (and the caravan trade is well attested and the only interest that is apparent in the region), then there would not be any point in the maintenance of a post the size of that at Medain Saleh at such considerable distance from the main centres of the kingdom. Thus, Medain Saleh’s military role should be seen as derived from its commercial role, not as supplementary to it. If there had been no important caravan traffic passing through the site, there would have been no reason to base a military presence there, nor indeed to maintain any kind of post in this area.

On the contrary, the continued occupation of Medain Saleh by a considerable garrison, apparently much larger than that at Leuke Kome (which only warranted a centurion in the mid-first century), indicates that the commercial importance of the

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87 J. Bowsher "The Frontier Post of Medain Saleh", 27.
site was maintained at least up until A.D. 75, the date of the last dated tomb inscription. Of course, this does not necessarily mean that Medain Saleh was abandoned at that time, only that tomb construction ceased there. Burial after that date may, for instance, have been in already existing family tombs, or else the garrison at the site was reduced or removed for some reason. F.V. Winnett, working from Nabataean inscriptions at Hegra and Safaitic inscriptions, has postulated that one Damasi, elder brother of the strategos of Hegra, Maliku, unsuccessfully rebelled shortly after the accession of Rabbel II in A.D. 71, involving some of the Safaitic tribes of the area in his attempt. Although nothing is known of the course of the rebellion or the fate of Damasi other than that the rebellion was defeated, it is possible that a military rebellion at Hegra might have subsequently caused the removal or downgrading of the force there, perhaps as a security measure to avert the possibility of another such revolt. It is also possible that the revolt was so serious that the garrison of Hegra was substantially destroyed and could not be replaced. Clearly, the importance of Medain Saleh due to its trade had continued at least until this time, and even the lack of tomb inscriptions after A.D. 75 does not necessarily mean that the site had lost its significance. The fact that its importance did continue after A.D. 75 is demonstrated by the Roman occupation of the site after they annexed the Nabataean kingdom in A.D. 106, which is known from the Roman military inscriptions at the site. Clearly whatever had caused the Nabataeans to downgrade or remove their post at Hegra in A.D. 75 was not a permanent situation, and thus it

90 Ibid., 57.
can be shown that the incense trade would have continued to pass through the station at Medain Saleh throughout the first century A.D. and even later.

Whatever happened to the trade passing through Leuke Kome, the traffic passing up the incense road from southern Arabia continued to flow for at least the first three quarters of the first century, and probably right through that century. The theory that the sea trade replaced the more expensive caravan traffic at the beginning of the first century is clearly wrong, because the Nabataean investment in the construction and garrisoning of Medain Saleh at the same time would have been completely pointless if the overland traffic had ceased. The presence of Nabataean and then Roman troops at this location is clear proof that the ‘incense road’ did not cease its operation during the first century, unless it did temporarily for the last quarter of that century. This traffic, moreover, must have still been of considerable value, for it was considered worthy of a sizable protective force at Hegra and consequently of substantial military expenditure.

This continued existence of the trade along the incense road when cheaper waterborne transport existed would seem to require some explanation. Groom has shown that this fact can be explained by the timing of the frankincense harvests in Arabia with regard to the optimum sailing times for the Red Sea, combined with the

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92 Initially, Negev’s thesis seems to have been that the decline in the trade of the Nabataean kingdom mainly occurred with a nomadic destruction of Oboda and the sites on the Petra-Gaza road in the mid-1st century (see e.g. “The Date of the Petra-Gaza Road”, 97), coinciding with a deliberate Roman redirection of the trade. Later, he seemed to favour a loss of trade as early as A.D. 7, basing this on the silver content of Nabataean coinage (see below). Needless to say, the two dates are incompatible; if the trade were lost in A.D. 7 the occupation of the Petra-Gaza road and Medain Saleh until after the middle of the first century would not seem to have had a raison d’être; equally if trade continued until that time then Strabo’s comment about the trade being redirected to Myos Hormos only refers to a small proportion of the trade (i.e. that going through Leuke Kome) and does not affect the main land-based commerce which would appear to have continued uninterrupted.
greatly increased demand for the aromatics which caused the growers to commence a second harvest.\textsuperscript{93} The harvest times for the frankincense are noted by Pliny:

\begin{quote}
meti semel anno solerat minore occasione uendendi; iam quaestus alter am uindemia adfert. prior atque naturalis uindemia circa canis ortum flagrantissimo aetu,

... autunno legitur ab aestiuo partu: hoc purissimum, candidum. secunda uindemia est uere, ad eam hieme corticibus incisis; rufum hoc exit, nec conparandum priori.
\end{quote}

When there was less opportunity to sell, it was the custom to gather it once; but now profit brings in another harvest. The earlier and natural harvest is around the rising of the dog-star the Summer crop is collected in the Autumn: this is the most pure, and is white. The second harvest in in the Spring, the bark having been cut in the Winter for this purpose; red sap comes from this, not to be compared with the former.\textsuperscript{94}

It is clear from this passage that upon the establishment of the \textit{pax Romana} the Arabian aromatics trade experienced a dramatic upsurge just as did the Indian trade into the Egyptian Red Sea ports as mentioned by Strabo and discussed earlier. Thus, any consideration of sea trade outstripping land-based caravan traffic must also take into account the fact that it occurred at a time of great increase in the \textit{volume} of trade. While the proportion of trade going by sea may have been greater, the volume of trade increased also, so that even with a reduced proportion the land-based traffic was still significant, as indeed the construction and maintenance of Medain Saleh attests.

In addition, when the harvest times supplied by Pliny are compared with the sailing times mentioned in the \textit{Periplus}, a discernible pattern of trade emerges which can account for the continued survival of the land-based caravan traffic even after the

\textsuperscript{93} N. Groom \textit{Frankincense and Myrrh}, 146-148, 212-213.
\textsuperscript{94} Pliny \textit{NH} XII. 32
Red Sea trade became predominant. The *Periplus* makes it clear that ships sailing to India could not participate in the better Autumn crop of frankincense, as they sailed from Egypt in July, and did not return until the time of the Spring crop. They could collect some of this inferior crop at Moscha Limen on their return journey. The journey to collect the Autumn crops of myrrh and frankincense had to be organised separately, commencing in September, and returning with the north east monsoon which usually commenced in mid-October. The incense caravans, which of course did not have to wait for the monsoon to commence, would be able to arrive at Petra and Gaza at about the same time that the ships were leaving South Arabia. Thus the ability of land-based traders to get their incense to market before the seaborne traders could might then provide a reason for the continued survival of the overland trade when the alternative of cheaper sea transport was available. The trading and transport cycle is illustrated in the following chart:

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95 N. Groom *Frankincense and Myrrh*, 213.
96 *Periplus* 39, 49, 56
97 *Periplus* 32
98 *Periplus* 24, 28
99 N. Groom *Frankincense and Myrrh*, 213.
100 Ibid.
101 The table is based on that in Groom *Frankincense and Myrrh*, 147. Note that the “Autumn crop” had to be stored at the place of harvest during the summer as the heavy rains of the South West monsoon made the tracks and waterways of Southwest Arabia impassable until September.
Table III. 1: The Frankincense Trading Cycle

<table>
<thead>
<tr>
<th>Month</th>
<th>Climatic Conditions</th>
<th>Frankincense Harvest</th>
<th>Sea Trade</th>
<th>Land Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>N.E. Monsoon</td>
<td>&quot;Spring&quot; Harvest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb.</td>
<td>N.E. Monsoon</td>
<td>Transport to Ports</td>
<td>Leave S.W. Arabia</td>
<td>En Route</td>
</tr>
<tr>
<td>Mar.</td>
<td>N.E. Monsoon</td>
<td>En Route</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr.</td>
<td></td>
<td>Incision of Trees</td>
<td></td>
<td>Arrive at Gaza</td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun.</td>
<td>S.W. Monsoon</td>
<td>&quot;Autumn&quot; Harvest</td>
<td>Leave Egypt</td>
<td>Leave S.W. Arabia</td>
</tr>
<tr>
<td>Jul.</td>
<td>S.W. Monsoon</td>
<td>Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>S.W. Monsoon</td>
<td>Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep.</td>
<td></td>
<td>Transport to Ports</td>
<td>Leave Egypt</td>
<td>Leave S.W. Arabia</td>
</tr>
<tr>
<td>Oct.</td>
<td></td>
<td></td>
<td>Reach S.W. Arabia</td>
<td>En Route</td>
</tr>
<tr>
<td>Nov.</td>
<td>N.E. Monsoon</td>
<td>Leave S.W. Arabia</td>
<td></td>
<td>Arrive at Gaza</td>
</tr>
<tr>
<td>Dec.</td>
<td>N.E. Monsoon</td>
<td>Incision</td>
<td></td>
<td>Arrive in Egypt</td>
</tr>
</tbody>
</table>

The fact that the caravans could get their incense to the markets before the ships could would seem to explain why the more expensive land transport was able to survive. It is clear that, modern theories notwithstanding, the overland incense trade from South Arabia was never fully supplanted by the sea route and thus it would have continued to be used throughout antiquity, indeed for as long as the demand for frankincense and myrrh continued.

*The Petra - Gaza Road*

The apparent decline of sites and roads in the Negev region which has been adduced as evidence of Petra's decline in the first century has also been shown to be incorrect. Initial surface surveys of the region showed no evidence of use of the Petra-Gaza road past the middle of the first century A.D., and thus it was concluded that the trade going through Petra had dried up in accordance with Strabo's statement.
about the decline in traffic through Leuke Kome. More recent excavations, however, have shown that the roads in fact continued in use throughout the whole of the first century and well into the Roman period after annexation. Cohen has excavated such sites as Moje ‘Awad and Horbat Qasra, military sites on the Petra-Gaza road. These sites have been identified as road stations rather than fortresses due to their poor siting from a military point of view, and were clearly intended to protect and perhaps monitor the traffic that was using the road. Moreover, the full examination of these sites showed that they were not abandoned in the first century but continued to be used until well into the Roman period. Moje ‘Awad, for example, contained coins from the reigns of Aretas II, Aretas IV, Rabbel II, Trajan, Commodus and Caracalla as well as pottery and other evidence, showing clearly that it was an important way station on the road from Petra and that it continued to be so until at least the Severan period. Similar finds were reported at Horbat Qasra, which yielded a coin of Caracalla and pottery from the second-third century A.D., and at the nearby site of Mesad Neqarot, which was another road station on the route. Here, Cohen discovered Nabataean potsherds and coins of the first century A.D., while another tower 25m west contained pottery and coins from the second and third centuries A.D.

This evidence makes it clear that the Petra - Gaza road continued in use throughout the first century A.D. and for some time after, and that both the Nabataean and Roman governments maintained their military protection of the route, as evidenced by the continuing occupation of military sites along the route.

102 A. Negev “The Date of the Petra - Gaza Road”, 97.
103 R. Cohen “New Light on the Date of the Petra - Gaza Road”, 242-244.
104 Ibid., 243.
105 Ibid.
Accordingly, there is no support for the theory that Petra declined due to a loss of trade in the first century to be found in an examination of these roads. On the contrary, such an examination makes it quite likely that the aromatics trade did not disappear, for the traffic on this road was considered worthy of protective installations. Although we can never be sure as to the exact purpose of any military installation or set of installations, it is certainly the case that some considerable traffic must have been using the road throughout this period. Since there is abundant literary evidence for the use of this road by the incense trade in the early part of the first century, there is no real reason to suppose that such trade did not continue to use the road later in the century and into the Roman period. Furthermore, Cohen's investigations seem to show that Oboda was continually occupied through the period,\textsuperscript{107} thus indicating that Negev's thesis of a massive nomadic incursion in the mid-first century A.D. which resulted in the destruction of Oboda and the abandonment of Medain Saleh\textsuperscript{108} is largely ephemeral. While it is certainly possible that there were disruptions in the course of the first century caused by nomadic incursions, their effects seem to have been quite limited and of no great duration. There does not seem to have been any disruption of the incense trade, or at least none that has left any tangible evidence. Thus, the evidence from the Petra-Gaza road does not provide any support for the contention that the trade of the Nabataean kingdom declined during the first century A.D.

\textsuperscript{106} Ibid., 243-244.
\textsuperscript{107} Ibid., 246.
\textsuperscript{108} Negev surmises that nomadic tribes threatened the Nabataean realm after the middle of the first century A.D., and that the large garisson at Hegra was designed to hold them off. He states that the failure of the Nabataeans to contain the nomads resulted in the abandonment of Hegra and a large scale nomadic invasion which resulted in the destruction of the Nabataean sites in the Negev. See A. Negev "The Nabataean Necropolis at Egra", 229-230.
The Silver Content of Nabataean Coins

It nonetheless remains true that there may have been some decline in Nabataean prosperity through this period, although any decline was nowhere near as catastrophic as has been postulated. It would, however, account for the decline in the silver content of the Nabataean coinage throughout the period, as was studied by Negev and adduced as a proof of a decline in the Kingdom.\textsuperscript{109} The decline can be seen clearly in Graph III.1, showing the silver content of the Nabataean silver \textit{drachma} throughout the first century A.D, expressed as a percentage (i.e., the fineness of the coin).\textsuperscript{110} This graph shows clearly that there was a serious decline in the silver content of Nabataean coins over this period, to the extent that they would have been substantially useless for foreign trade by the time of the reigns of Malchus II and Rabbel II. Negev used these data to construct his theory of an effective cessation of the incense trade through Petra in A.D. 7 (the time of a sharp decline in the silver content), resulting thereafter in a prolonged economic crisis in the Nabataean kingdom throughout the first century A.D. which is reflected by the continuing decline in the silver content of Nabataean coins of these periods.\textsuperscript{111} While the continued existence of the incense trade through Petra throughout most of the first century A.D. has already been demonstrated, we must also account for this apparent decline in the fortunes of the kingdom during this period.

\textsuperscript{109} A. Negev "Numismatics and Nabataean Chronology", 126.
\textsuperscript{110} The tables from which these graphs have been compiled and their accompanying references are given in Appendix B.
\textsuperscript{111} A. Negev "Numismatics and Nabataean Chronology", 126.
Certainly in the later first century, the Nabataean coinage would have been useless for international transactions due to its debasement, and can only have been used within the kingdom itself. Silver, however, is not the only medium of exchange suitable for the incense trade; one might well argue in fact that gold would have been more suitable for the trade in frankincense and myrrh due to the very high value of the goods. Thus, the strong possibility exists that the Nabataeans continued to trade using gold vessels and bullion, stamped with a fixed weight and functioning as a large denomination coin. The likelihood of this is shown by the fact that the distinctive red-gloss Nabataean pottery appears to have been made in a limited number of sizes, probably made in imitation of gold vessels which were themselves only manufactured in a limited range of standardised weights. Thus, while the silver content of Nabataean coinage had declined greatly, the presence of these stamped gold vessels of fixed and uniform weights would have provided the Nabataean merchants with a perfectly adequate means of exchange.

The fact that the devaluation of the coinage was not an indicator of the relative prosperity of the kingdom is shown by the fact that the vast majority of the magnificent monuments of Petra which can still be seen today were built in the course of the first century, the very period of the alleged decline. Negev, however, attempts to explain the construction of these monuments as the expenditure of savings rather than as an indicator of the continued viability of the incense trade. While not without parallels, such extravagance seems extraordinary, particularly as it

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112 Ibid.
114 Ibid., 240.
postulates that the Nabataeans built few monuments in the period of their greatest prosperity but then commenced building them after the source of that prosperity was lost. On the whole, it seems far more likely that the magnificent monuments of Petra are an eloquent witness to the continuing prosperity of the Nabataean realm in the first century A.D. Indeed, it is possible that these buildings may provide some explanation for the drop in silver content of the coinage visible in A.D. 7, as the enormous expenditure which such a building program would have made necessary might have caused some economic pressure and a resultant debasement of the coinage.

It should also be noted that in the period of the most severe debasement, the reigns of Malchus II and Rabbel II, there was in fact a similar, though nowhere near as severe drop in the silver content of Roman Imperial coinage. This debasement can be seen in Graph III. 2, which records the devaluation of the Roman silver denarius, by showing the relative fineness of the coins.117

116 A. Negev "Numismatics and Nabataean Chronology", 126.
117 It should also be noted that the weight of the denarius was also reduced over the same period: thus the actual amount of pure silver in each coin was comparatively even less than the fineness of the coins would indicate.
Graph III. 1: Silver Content of Nabataean Coins
28 B.C. - A.D. 100
Graph III. 2: Silver Content of Roman Imperial Denarii
30 B.C. - A.D. 100
When the silver content of the Nabataean coinage is compared to the silver content of Roman Imperial issues over the same period, it quickly becomes apparent that the declines in the silver content of Nabataean coins are generally equivalent, though more severe, to debasements of Roman coins of the same time periods. It would therefore seem likely that the debasements of Nabataean coinage are responses to the same economic factors as are the Roman declines, and thus not necessarily anything to do with the incense trade. While it is not proposed to go into the reasons for the Roman devaluation, it would seem that there was a general period of economic pressure throughout the whole Mediterranean area in the mid to late first century A.D. which caused it. Thus, we may lay the blame for the decline in the Nabataean coinage at the same door rather than postulate a decline in the incense trade to explain it. The reason that this economic pressure caused a far steeper decline in the values of Nabataean coins compared to Roman would then be the fact that the Nabataean kingdom had no silver reserves of its own, whereas the Romans of course still had access to considerable supplies. Thus, any pressure which caused a drop in the supply of silver at Rome would most probably cause a far steeper drop in supply at Petra. This then is in all probability what happened to the silver coins of the Nabataeans in the later first century A.D.

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118 K.W. Harl Coinage in the Roman Economy, 103, who also points out that the client king of Oshroene in Northern Mesopotamia also minted heavily debased drachmae over the same period.
The Development of Nabataean Agriculture and the Importance of the Hauran

A further argument which has been suggested as proof of a trade decline in the Nabataean kingdom is the development of intensive agriculture in some areas of the realm, most notably in the Hauran but also in other areas. In his investigations Negev identified what he called the 'Late Nabataean period' from c. A.D. 70 to A.D. 106 in which he asserted that the Nabataeans' former dependence upon trade was replaced by intensive agriculture both in the Negev and in the Hauran. While it is certainly true that there is considerable archaeological evidence for the development of such facilities, the conclusion that they were developed to replace trade is not justified. On the contrary, it has been pointed out that an active trade would cause a large non-productive population, which would then necessitate the development of more agriculture in order to feed the communities of merchants, caravaneers and others associated with the trade. It is thus possible that the development of agricultural installations in the Negev and the Hauran was a response to increased trade, rather than evidence of a decline in trade.

Indeed, Zayadine has conducted investigations around the site of Petra itself at such places as al-Barid, Wadi Sleisel and Sabra which reveal agricultural installations in close association with caravanserais and situated on roadheads leaving the capital. These ‘satellite-stations’ around Petra each consist of water-points, a fort-caravanserai, a roadhead and agricultural installations, in which caravans and those

119 A. Negev “The Date of the Petra - Gaza Road”, 97; A. Negev “The Nabataeans and the Provincia Arabia”, 639.
120 See A. Negev “The Nabataeans and the Provincia Arabia”, 660-668.
associated with them could be serviced. At Wadi Ras Sleisel, for example, there are remains of considerable agricultural terraces used for both food production and water catchment, as well as a military structure, all situated on an important east-west route to the north of the main city of Petra. This, as Zayadine concludes, would seem to be a station designed for the provisioning of caravans, as well as their protection, control, and no doubt taxation. These installations, including their agricultural areas, were clearly designed and built with the needs of the caravan trade in mind, as their siting on caravan routes leaving the city shows. They demonstrate clearly that the Nabataean development of agriculture cannot be divorced from their trade: rather there was a close association between the two. It is clear then that at Petra trade and agriculture complemented one another, and there is no need to suppose that the situation in the Negev or the Hauran was any different. Thus, the development of agriculture by the Nabataeans toward the close of the first century A.D. cannot be taken as evidence of a decline in the aromatics trade in the same period; it may, in fact, be evidence of its continued importance.

There is, however, some evidence that would seem to indicate a shift in the northern trade route from the Arabian gulf via Dumata, which might account for the development of agricultural installations in the Hauran in particular. Pliny speaks of this route passing from the gulf to Petra via Dumata. In the latter part of the first century A.D. this route seems to have shifted to travel from Dumata up the Wadi

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125 Pliny NH VI. 32
Sirhan to Azraq, a significant water source, and then to the northern Nabataean city of Bostra. One of the main pointers to this is the fact that Rabbel II seems to have moved the royal residence to Bostra. There is evidence of a considerably increased Nabataean investment in the north of the kingdom during the reigns of Malchus II and Rabbel II, indicated by the vast increase in the number of inscriptions in the Hauran area dating from those reigns compared to the earlier period. The presence of a trading route here also seems to be indicated by the presence of a Nabataean garrison at Dumata, probably protecting trade travelling from there up the Wadi Sirhan to Azraq, which was noted earlier. It would seem, then, that the trade which had been passing from the region of Gerrha across the Arabian peninsula to Petra via Dumata began in the mid-first century to be rerouted from Dumata up the Wadi Sirhan to Bostra.

It has been suggested that this shift was largely due to an attempted Roman 'redirection' of the trade routes, causing trade to travel via Bostra and Palmyra to the detriment of the traffic which passed through Petra. The link with trade at Palmyra should be rejected, however, because, as has been noted, the commerce at Petra seems to have consisted mostly of incense brought from Arabia Felix, for which there is no practical route through Palmyra. As will be discussed later, the trade at Palmyra consisted chiefly of items brought by sea from India to the Arabian Gulf. Accordingly, the prosperity and trade of Palmyra can have had little or no bearing on that of Petra as they were based upon different commodities. The deliberate Roman

126 D. Kennedy & D. Riley Rome’s Desert Frontier from the Air (London 1990), 109.
127 G. Bowersock Roman Arabia, 73; F. Millar The Roman Near East, 408.
129 III. 1 above.
fostering of Bostra to replace Petra can also safely be rejected, as there is no reason to imagine why the Romans would prefer one over the other: both were part of the Nabataean kingdom, and in either case the Nabataeans would benefit from the trade. What is far more likely is that the traders themselves chose to use this route, and that the reason for this is to be found in new economic conditions within Roman territory which might have caused traders to favour the Bostra route over that which passed through Petra.

The reason for this shift in the trade route can probably be found in the rising prosperity of the Decapolis region in this period. Indeed, it has been noted that the increasing wealth of the Decapolis in at this time, exemplified by such cities as Gerasa, coincides with the increased Nabataean activity in the Hauran and the development of Bostra.\textsuperscript{132} Much of this development is associated with the Syrian legateship of M. Ulpius Traianus, the father of the future Emperor Trajan, during the reign of Vespasian.\textsuperscript{133} This development was in turn made possible by the construction of roads linking the Decapolis to Caesarea on the Mediterranean during the Jewish war, which after that conflict would have dramatically improved communications across the Jordan to the Mediterranean.

However, even though many scholars have noted a probable ‘shift’ in trade routes which caused the development of Bostra in this period\textsuperscript{134}, none seem to have linked this shift with the increased prosperity of the Decapolis at the same time.

\textsuperscript{130} J.W. Eadie "Strategies of Economic Development in the Roman East", 118.
\textsuperscript{131} IV. 1 below.
\textsuperscript{133} G.W. Bowersock "Syria under Vespasian", 138.
\textsuperscript{134}
Trade routes, after all, do not shift by themselves, but only with good reason. It is suggested, then, that the reason for the shift of the route to Bostra rather than to Petra was as a result of the increased urbanisation of and prosperity of the Decapolis and the greater access to the sea afforded by the new roads. This easier access attracted merchants to use the Wadi Sirhan and to carry their goods through the Decapolis to the sea, which in turn caused the Nabataeans to involve themselves in this area and to shift the 'centre of gravity' of their realm to the Hauran. This shift is reflected in the increase in the number of Nabataean inscriptions in the region, as already noted, and in the considerable evidence of Nabataean commercial activity within the Decapolis. The excavations of Philadelphia and Gerasa have provided evidence of considerable Nabataean activity and occupation, and there is a memorial nepesh (cenotaph) from Petra which commemorates a Nabataean who resided in Gerasa and was buried there. Thus, there is a great deal of evidence to suggest that Nabataeans lived and traded in the Decapolis, which experienced a rise in prosperity in the later first century A.D. There is clearly no reason to posit a severe economic decline in the Nabataean realm at this time, as even if the trade through Petra was in some decline (which itself seems considerably less likely than has been thought), there was obviously still a great deal of trade passing through the North of the kingdom.

It must, however, be remembered that much of this trade would have been that which had until then come from the Arabian Gulf via Dumata to Petra. The trade

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134 G.W. Bowersock Roman Arabia, 156; F. Millar The Roman Near East, 408.
which came up the ‘incense road’ from southern Arabia could also use this route by travelling via the oasis and emporium of Teima and thence to Dumata, but this route would add quite some distance to the journey and there is no reason to suppose that the incense traffic would have abandoned Petra entirely. Thus, even though it would seem that some trade was redirected from Petra to Bostra, a fair proportion of the trade would have continued to use the southern route. In any case, all the commerce would have continued to pass through the Nabataean realm at some point, so even if Petra itself suffered some diminution of its trade this would seem to be compensated by the increase in traffic via the Wadi Sirhan, which would still enrich the Nabataean kingdom now centred at Bostra.

136 J. Starcky “Nouvelle épitaphe Nabatéenne donnant le nom sémitique de Pétra” RBibl 72 (1965), 95-97.
Illustration III. 1: Ed-Deir (The Monastery), Petra. This structure is probably a temple, completed in the years before the Roman annexation of the Nabataean kingdom.

Illustration III. 2: The Royal Tombs, Petra.
Illustration III. 3: The el-Beidha area north of Petra. This would have been a suitable area for the revictualling and organisation of caravans, and remains of installations have been found here.

Illustration III. 4: Central city area, Petra.
Conclusion

Thus it can be seen that there is no real evidence to postulate a general collapse of the aromatics trade passing through the Nabataean kingdom in the first century A.D. The idea that the Romans might deliberately try to cause a decline is not sound: had they wished to hurt the Nabataean realm, the Romans would have conquered it and appropriated its wealth by that means. It is highly doubtful that the application of 'economic leverage' would have occurred to them and there is no good reason to think that they would want to harm the Nabataeans in any case.

Even if a decline is presumed to have resulted indirectly from the buildup of trade and facilities in Egypt, the evidence cannot be made to prove it. The persistent comments by some scholars that trade through Petra was affected by the rise of Palmyra ignore the fundamental fact, already noted, that trade in the Nabataean kingdom and at Palmyra were, so far as our sources indicate, in different commodities and the two trade routes are accordingly unrelated. Strabo's statement about a decline in trade can really only be taken to refer to trade passing through Leuke Kome; and when the size of the garrisons at Leuke Kome and at Hegra are compared it becomes apparent that the majority of trade continued to pass through the Nabataean kingdom by the overland 'incense road', even after the establishment of the Egyptian Red Sea trade. Archaeology has shown that the road from Petra to Gaza continued to be used throughout the first century and into the Roman period, and as it was used for aromatics traffic at the beginning of the first century there does not appear to be any good reason to suppose that this traffic was routed elsewhere after the middle of that century.
The decline in silver content of Nabataean coinage indeed may reflect some economic pressure, but there is no way of knowing whether or not such pressure was related to the aromatics trade. It must be recalled that there is a similar, although perhaps not as serious, decline in Roman silver coinage of the same period, which might be taken as an indicator of a more general economic pressure throughout the Mediterranean basin.

On the whole, then, it would seem that the trade in Arabian aromatics remained reasonably steady throughout the first century A.D. This is not to say that there were not fluctuations in the trade: Leuke Kome seems to have lost some of the importance it had at the beginning of Augustus' reign; there were perhaps disturbances with the nomads in the middle of the first century and there seems to have been some economic pressure and perhaps decline in the latter half of that century, but through all this the Arabian incense trade through the Nabataean kingdom appears to have survived. Moreover, as long as the trade survived it would have continued to bring prosperity to the Nabataean realm. This accounts for the obvious material prosperity displayed in the magnificent monuments of Petra which mostly date from the first century, the very period of the alleged decline. Thus the evidence, when properly considered, shows that the kingdom which the Romans took over in A.D. 106 still drew a substantial proportion of its wealth from the continuing trade in Arabian incense.
The Nabataean kingdom is often, particularly in more popular literature, portrayed as largely dependent upon the caravan trade, and its citizens are thought of as wealthy merchants whose lives revolved around the continuance of the incense traffic. While any such depiction must fail to catch the full variety of any ancient society, there is nonetheless good reason to wonder to what extent this picture might be true. Does the evidence in fact show that the Nabataean kingdom was dominated by a mercantile class, or that its government was deeply involved in the trade, or indeed that the economy of the kingdom was primarily dependent upon the caravan trade at all?

To deal first with the individuals actually involved in the trade, there is in fact no great abundance of evidence for the traders and caravaneers who operated within the bounds of the Nabataean kingdom. Whereas for a place such as Palmyra there exists a corpus of inscriptions which allow us to learn much about those involved in the trade there, in the Nabataean realm there is no such evidence. Consequently, no firm conclusions can be made about such things as the social status of merchants in the Nabataean kingdom.

Despite this, there is still some evidence which allows us to learn a little of the nature of this trade and of those who were involved in it. Some literary and inscriptional sources do mention the activity of Nabataean merchants along the incense road, in the kingdom itself as well as throughout the Roman Empire, while other sources also give an indication of the involvement of the Nabataean government in certain aspects of the trade.
The Nabataeans as Traders

The earliest literary references describe the Nabataeans as a people who were nomads rather than the settled people we find in the Roman period. In their early years it would seem that the Nabataeans indulged in some brigandage, as Diodorus reports:

τά μὲν οὖν πρὸς τὴν ἐω μέρη κατοικοῦσιν Ἀραβὲς οὗς ὀνομάζουσι Ναβαταῖοι, νεμόμενοι χώραν τὴν μὲν ἔρημον, τὴν δὲ ἄνυδρον, ὀλύγην δὲ καρποφόρον. ἔχουσι δὲ βλούν λῃστρικών, καὶ πολλὴν τῆς ὁμόρου χώρας κατατρέχοντες ληστεύουσιν, δυτεῖς δίσμαχοι κατὰ τοὺς πολέμους.

Toward the eastern parts there live the Arabs who are called Nabataeans, who inhabit a country that is partly deserted and partly waterless, with a small part which is fruitful. Leading a life of brigandage they overrun and pillage the greater part of the surrounding territory, and are difficult to defeat in battle.

It would seem from these references that in the earlier Hellenistic period the Nabataeans were what we might consider ‘typical’ nomads. Thus, when they settled into a more sedentary lifestyle in later years they may well have retained the skills of the desert and the knowledge of how to survive in it. These skills would certainly have placed them in an advantageous position to exploit the caravan trade coming up from southern Arabia, and this is what they seem to have done in the later Hellenistic period.

Whether or not the Nabataeans settled under the influence of the trade or simply began to be involved in the trade after they had settled is impossible to tell. However, it would be reasonable to surmise that once they had become involved, the combination of their geographical location astride the trade routes and their skill in

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138 Diodorus Siculus II. 48. 1-2; XIX. 94. 2-4, 10
139 Diodorus Siculus II. 48. 2
negotiating the desert paths through that territory would enable them to profit greatly from the southern Arabian incense commerce.

The Nabataeans would thus seem to have been chiefly involved in the commerce as *transporters*. They did not grow the crops themselves, nor did they bring them from the incense fields of southern Arabia after they had been harvested. Their role seems to have been that of taking over the incense from the Minaean and Gerrhaean caravans when they arrived in Nabataean territory, and then conveying them to the sea at Gaza and Alexandria. As discussed earlier in the chapter, Diodorus and Strabo both refer to the fact that the Minaeans and Gerrhaeans conveyed their aromatics to Petra,\(^1\) while in another place Diodorus states that the Nabataeans conveyed to the Mediterranean goods which they had received from those who brought them from Arabia Felix:\(^2\) these people were, in all probability, the Minaeans of the other reference. As to the organisation of the trade, the relative wealth or social status of those involved, or the financial arrangements which were undertaken, we have virtually no information at all. Perhaps the most likely scenario is that the goods were purchased at the Nabataean border by Nabataean camel-traders who then conveyed their goods through the kingdom and then to the sea-coast at Gaza or Alexandria. There, the goods could have been purchased from the camel caravans by Roman or Greek merchants, or perhaps other Nabataeans, who shipped them to the markets of Rome and other locations throughout the Empire.

The medium of exchange for these transactions was most probably gold. Strabo records that the merchants of Arabia Felix sold their wares for gold and

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\(^1\) Diodorus Siculus III. 42. 5; Strabo *Geog.* XVI. 4. 18
\(^2\) Diodorus Siculus XIX. 94. 4-5

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silver, and it was thus likely that these were the commodities that the Nabataeans traded with the Minaeans and Gerrhaeans for their frankincense and myrrh. As has been discussed, the silver content of Nabataean coinage dropped dramatically in the course of the first century A.D. to the point where it would have been useless for all except transactions within the kingdom itself. However, the Nabataeans probably continued to trade using gold vessels, stamped with a fixed weight and functioning effectively as a large denomination coin. Thus, even though the silver content of Nabataean coinage had declined greatly, the presence of these gold vessels would have provided the Nabataean merchants with a means of exchange to continue their trade.

This, then, is as far as the paucity of evidence will allow us to go, and even much of this is unproven. However, it is at least possible that the trade was conducted along these lines: after the frankincense and myrrh harvests, caravans of Nabataean merchants would generally travel to some point at the edge of their kingdom, such as Hegra, Teima, Dumata or Leuke Kome, where they would await the caravans (or in the case of Leuke Kome the ships) which brought the incense from southern Arabia. There, they would pay for the goods with gold bullion and vessels, and convey them in caravans through the Nabataean kingdom, perhaps transhipping and/or reprocessing them at Petra, and then carry them to Gaza or Alexandria. At these ports, they would probably sell their wares to Greek or Roman traders who then conveyed the incense across the Mediterranean.

142 Strabo Geog. XVI. 4. 22
143 III. 2 above.
144 A. Negev “Numismatics and Nabataean Chronology”, 126.
We must, of course, remember that this is essentially speculative, and even if it was generally the case we cannot rule out exceptions. Some Nabataeans may well have made the journey all the way to southern Arabia themselves; and Artemidorus reported, as recorded in Strabo, that Romans (who were very possibly merchants) were operating in Petra.\textsuperscript{146} Besides these, we certainly do have evidence of Nabataean merchants operating within the Mediterranean basin. These merchants apparently, instead of on-selling goods at the Mediterranean ports, became involved in the next step of the trade; that is, in conveying the goods across the Mediterranean and selling them in the heart of the Empire itself. While this thesis will confine itself to the trade in the eastern provinces themselves, it is still worthy of note that Nabataean merchants seem to have involved themselves in the transport and sale of the goods in Rome and in the other centres of the Empire as outlined in the introduction.\textsuperscript{147} Again, as with those who led and went on caravans in the Arabian desert, we know little about exactly who these people were or what their social status was.

One thing which we can safely dismiss is the possibility of a governmental monopoly over the caravan trade, whereby the Nabataean government itself took over the shipping and sale of the goods passing through its territory. Generally it would seem that the trade was left in the hand of private individuals, as Pliny gives the impression that the camel-traders were private citizens who were compelled to pay taxes and various duties in order to pass through the territories (including the Nabataean realm) which they had to traverse in order to reach the Mediterranean:

\begin{itemize}
\item[146] Strabo \textit{Geog.} XVI. 4. 21
\item[147] See I. 4 above.
\end{itemize}
Indeed, wherever their journey goes they pay at one place for water, at another for food or lodging, and also the various taxes, so that for one camel 688 denarii are consumed in reaching the Mediterranean, and then taxes are paid to the publicans of our Empire.\textsuperscript{148}

The language used in this account would certainly seem to indicate that the loads of incense were conveyed by private individuals over the entire course of their journey, who paid taxes and dues to various authorities along the route, among whom was the Nabataean government. There is not the faintest suggestion at any time that the Nabataean kings were in any way directly involved in the trade, and we must therefore conclude that they confined their attentions to the protection of the routes and the collection of the taxes from those who were using them.

It is clear then that the Nabataean government did not attempt to establish any kind of monopoly over the incense trade, instead leaving the trade in the hands of private individuals, be they Nabataean or Roman. However, there are certainly indications that the Nabataean government took an active interest in the trade and tried to promote it, chiefly it would seem by the construction of facilities for caravans and by the posting of troops in order to protect the caravan routes.

\textit{The Involvement of the Nabataean Government in the Trade}

Mention has already been made of the complex of ‘suburbs’ with agricultural installations and caravanserais which surround Petra.\textsuperscript{149} Due to the fact that these

\textsuperscript{148} Pliny \textit{NH} VI. 26

\textsuperscript{149} III. 2 above. For these suburbs see F. Zayadine “L’espace urbain du Grand Pétra”, 217-239.
stations appear to have been provided with military protection as well as watering and revictualling points. It would seem that they were constructed by the Nabataean government to meet the needs of the caravan trade. Zayadine suggests that they were built to enable caravans to be resupplied, controlled and taxed, as well as allowing the central area of Petra to be kept relatively free of the caravan traffic so that the city could concentrate on its important roles as a royal capital and religious centre. Thus, they are considerable testimony to the fact that the Nabataean government was very interested in the caravan trade, presumably because of the taxes and other revenues which could be gained from merchants using these facilities and the roads which passed through the realm.

As well as these facilities, there is abundant evidence that the Nabataean government desired to protect the caravan traffic by the protection of the caravan routes in more outlying areas. Archaeological evidence exists of a complex of stations in the Hisma area of southern Jordan, as well as the forts which protected traffic along the Petra-Gaza road which have already been discussed in a previous section of this chapter. The stations in the Hisma are sited so as to cover virtually any approach route that a caravan might take from Arabia into the Nabataean kingdom, and are clear evidence again of the interest which the Nabataean government took in the protection of the caravan traffic. Many of these stations were abandoned by the Romans on their annexation of the kingdom, but those on the route of the Via Nova

150 Ibid., 223.
151 Ibid., 230.
152 III, 2 above.
154 Ibid.
from Aqaba to Petra and those on the Petra-Gaza road were kept open, as will be discussed later in this chapter.

In the deeper desert, too, we find evidence of the Nabataean government's involvement in the protection and monitoring of the caravan traffic. There is evidence of a station of some sort manned by Nabataean military personnel at Durnata, at the entrance to the Wadi Sirhan, which presumably existed to protect the traffic entering the Nabataean realm from the trans-Arabian route from Gerrha and the Arabian Gulf. Similarly, at Medain Saleh, the point at which the 'incense road' from southern Arabia entered the Nabataean kingdom, there was a military station of particular importance, as has already been noted. Judging by the remains there, this post was of great significance during much of the first century A.D. Much information about it can be gleaned from the inscriptions on the tombs there, which are dated from A.D. 1 to A.D. 75, as well as other inscriptions found at the site. Prominent among those honoured with epitaphs are several high military officials, particularly those termed strategos, probably the military and civil commander of the city, as well as several named variously as hipparchos and chiliarchos. Although we cannot be sure about the organisation of the Nabataean army, it is nonetheless clear that these offices are of a high rank and accordingly the post at Medain Saleh was of considerable importance. Moreover, the tombs in which these persons were interred were among the largest and most elaborate of those at the site, showing that the military commanders were probably the most socially significant as well as the most wealthy segment of society at Hegra. This importance most probably derives

155 See III. 1 above.
from the significance of this station as a major stop on the ‘incense road’, and thus testifies to the high importance that the Nabataeans placed upon the protection of this route.

Regrettably, no such information can be gleaned regarding the merchants who operated there. Although there are numerous tombs with their owner’s name inscribed, the professions are not specified except in the case of the military officials just mentioned. It might be considered reasonable that these persons were merchants or their families, given the isolated nature of the site and its significance on the caravan route, but this cannot be known for sure. Similarly the monuments of Petra, described in tourist guidebooks as the “tombs of rich merchant princes” or words to that effect, in fact generally have no epitaphs at all, so we have no way of knowing who the people interred in them were and what their occupations may have been.

Despite this general lack of evidence, there are still some significant pointers which may allow us to gain some knowledge of the overall significance of the Arabian incense trade to the Nabataean kingdom, and some idea of its importance in the Nabataean economy relative to other sources of income.

The Economic Significance of the Trade in the Nabataean Kingdom

According to the ancient writers, the Nabataean kingdom appears to have derived its income from a number of sources. In the early years, it would seem that they were not yet agriculturalists. Early accounts describe them as nomadic pastoralists:

157 Ibid., 218.
Their custom is to neither plant grain nor to raise fruit trees, nor to use wine or build a house. If one is found acting against these laws, the penalty is death. They follow this law believing that those who own these things are easily compelled by the powerful to do their will in order to keep the use of them. Some of them raise camels and others sheep, grazing them in the desert.158

Other sources speak of the Nabataeans gaining considerable revenue from the bitumen of the Dead Sea,159 in addition to that which was obtained from the raising of livestock.160

Despite these other sources of revenue, however, Diodorus explicitly states that the Nabataeans became much more wealthy than the other Arab tribes because of their involvement in the trade in frankincense and myrrh.161 Thus, although he considers and mentions the other sources of income which the Nabataeans enjoyed, it is clear that in his view the pre-eminent wealth that they enjoyed over the other Arabs was entirely due to the trade which they carried on in carrying the frankincense and myrrh over their territory.

By the time Strabo was writing, it is clear that the Nabataeans had abandoned their former nomadic ways, and had become sedentarised, at least to some extent. He describes Petra as the “metropolis” of the Nabataeans,162 and mentions that they lived in stone houses in cities, and that they cultivated both agriculture and livestock.163

158 Diodorus Siculus XIX. 94. 3-4  
159 Diodorus Siculus II. 48. 6  
161 Diodorus Siculus XIX. 94. 4-5  
162 Strabo Geog. XVI. 4. 21  
163 Strabo Geog. XVI. 4. 26
Again, however, Strabo seems to indicate that the Nabataeans attained at least a great part of their wealth from their trading activities. Although he does not say this specifically, he gives great prominence to the fact that the Nabataeans were involved in the commerce in aromatics, occasionally stressing the large volume of traffic which passed through Petra.\textsuperscript{164} In addition, he mentions that the Sabaeans and Gerrhaeans had become extremely wealthy due to their involvement in the frankincense trade:\textsuperscript{165} it is not unreasonable to assume that the Nabataeans too, heavily involved in the same trade, would have grown wealthy in the same way. Certainly Strabo represents all the Arabs who were involved in the incense trade as being extremely wealthy, and the Nabataeans would have been no exception. Pliny also mentions the lucrative nature of the incense trade, and the amount expended in taxes and charges in getting a load of incense from Arabia Felix to the sea.\textsuperscript{166} Many of these taxes would no doubt have been paid into the coffers of the Nabataean kingdom.

Indeed, we can still see today the evidence of the Nabataeans' wealth. While we have no real way of determining the incomes of the kingdom or the expenditures to which it was committed, the spectacular monuments of Petra which the visitor can still view today provide convincing testimony to the wealth of the Nabataeans. The construction of such imposing edifices must have involved the Nabataeans in considerable expense, and it would seem that only in a period of great prosperity would they have been able to complete such an undertaking as they did.

\textsuperscript{164} See e.g. XVI. 4. 23-24. For the great volume of camel-traders travelling the route between Leuke Kome and Petra see XVI. 4. 23.
\textsuperscript{165} Strabo \textit{Geog. XVI. 4. 19}
\textsuperscript{166} Pliny \textit{NH VI. 26}
This point is particularly important when it is borne in mind that most of the monuments appear to have been constructed in the course of the first century A.D., testifying to this period as one of great wealth in the Nabataean kingdom and providing further proof that the incense trade had not ceased by the beginning of that century. Even if constructed over the course of several centuries these monuments would represent a great achievement, but built as they were in the space of little over one hundred years they show that the Nabataean kingdom must have been at the pinnacle of its wealth and prosperity during this period.

It is difficult to identify what could have caused this prosperity other than the incense trade. Certainly such things as agriculture, livestock raising and the bitumen of the Dead Sea must have contributed, but these by themselves are insufficient to explain the evident prosperity of the Nabataeans, particularly given the insistence of the ancient writers that this prosperity was a result of their trade. It would appear that, at least to a great extent, the prosperity of the Nabataean kingdom as evidenced in their monuments and as described by the literary sources must be ascribed to the caravan trade. This then gives rise to the question of whether terms such as ‘caravan city’, with all that they imply, can be legitimately applied to Petra. To what extent, then, was Petra a ‘caravan city’?

Was Petra a ‘Caravan City’?

M.I. Rostovtzeff coined the term ‘caravan city’ to describe several cities of the Roman East which he argued were primarily dependent on the caravan trade for...
their prosperity, and indeed in some cases for their very existence.\(^{168}\) Modern studies of the ancient economy have tended on the other hand to emphasise the importance of agriculture and pastoralism at the expense of long-distance trade.\(^{169}\) As discussed in the introduction, however, most models of the Roman economy nevertheless allow for the existence of some long-distance trade, particularly in easily transportable items of high value, into which category the Arabian incense fits admirably.\(^{170}\) Thus, even if we adopt a model which holds that the Roman economy was almost exclusively agrarian, the possibility of trade in high-value items such as spices or incense is still allowable, and indeed must be allowed due to the physical and literary evidence for its existence.

We might thus be justified in seeing certain cities of the Roman East which were conduits for this long-distance trade in high value items as exceptions to the general rule of agrarian dependency in the Roman Empire, regardless of the economic model of the ancient world favoured.\(^{171}\) Petra, among others, could definitely be considered as a candidate for such a place due to the ample evidence which shows that the trade passed through the city. It would seem foolish indeed to reject the testimony, both literary and archaeological, which seems to point to the fact that Petra did indeed gain much of its wealth through the caravan trade, for the sake of an economic model. The ancient writers mention the wealth of those engaged in the caravan trade, and also associate the Nabataeans with that trade, while the archaeological evidence shows extensive efforts were made by the Nabataean

\(^{168}\) M.I. Rostovtzeff *Caravan Cities*, passim.

\(^{169}\) See e.g. M.I. Finley *The Ancient Economy*.

\(^{170}\) For models of the Roman economy see K. Greene *The Archaeology of the Roman Economy*, 14-16. For these models as they relate to the eastern luxury trade see I. 3 above.

\(^{171}\) F. Millar *The Roman Near East*, 16.

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government to protect the trade; such an interest would seem pointless unless there were considerable revenues to be gained by offering such protection.

Of course, this should not obscure the fact that the Nabataean kingdom had other sources of revenue, as we have already seen. Agriculture and livestock were clearly significant, so Petra was not a ‘caravan city’ in the sense that the incense trade was its sole source of income and sole reason for existence. That the incense traffic was nevertheless a significant source of income cannot, however, be doubted. We might thus consider Petra to be a caravan city in the sense that the great prosperity and pre-eminent wealth of the place was largely due to the caravan traffic, and that the needs of the traffic were given some priority in deciding such things as military dispositions within the kingdom. Even if we allow that cities within the Roman Empire were almost exclusively centres of consumption financed and fed by the countryside round about them, we would still be justified in seeing places such as Petra as an exception to this rule, deriving at least a significant proportion of its income from the incense traffic which passed through it.

Conclusion

There would seem to be ample reason for considering that the Arabian incense trade was of great economic significance in the Nabataean kingdom, and that it also had some role in determining political developments there. Certainly, such military posts as Medain Saleh can show us that the Nabataean military played a significant role in the protection of the caravan traffic. The extensive system of fortified posts which the Nabataeans seem to have maintained shows that the Nabataean government
was willing to expend considerable amounts of money and effort in maintaining the caravan traffic and protecting the merchants. The evidence of the caravan stations around Petra also show that government involvement was not purely military, but also extended to the provision (no doubt at some cost) of watering and revictualling facilities for the caravans at Petra, and possibly at other sites as well. Thus, although we have no details of the system of taxation by which the government may have exploited the caravan traffic passing through its realm, we can take the involvement and interest of the Nabataean government in the Arabian incense trade as a very strong possibility.

Indeed, it has been pointed out that most of the expansionary moves of the Nabataean kingdom, whether to the Hejaz, the Wadi Sirhan, the Hauran or the Sinai, seem to have been dictated by trade motives. While this may be overstated, as agriculture was certainly an integral part of the colonisation of the Hauran at least, it is still true that the motivation of protecting the trade routes was at least present in all these cases, and probably dominant in some (e.g. the Hejaz and the Wadi Sirhan). Therefore, we can conclude that the incense trade of the Nabataeans was of sufficient interest to them that they were prepared to allow its needs to dictate much of their foreign policy, at least in the areas where their territory bordered the desert.

Despite this, we must confess almost total ignorance when it comes to the individuals who actually carried on the trade, or the manner in which this trade was conducted. They were no doubt wealthy, as it would be impossible to participate in such a trade if they were not. We do not know whether the tombs of Medain Saleh

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172 P.C. Hammond *The Nabataeans: Their History, Culture and Archaeology*, 65.
and Petra belong to merchants or not; if they do this would perhaps indicate a high social status more than simple wealth, but in the absence of any inscriptions directly linking these monuments to merchants or traders this must remain conjectural.

Nonetheless, from the evidence which can be gleaned about the Nabataean kingdom, we may legitimately conclude that the Arabian incense trade held considerable significance for the economy of the area. While there were certainly other sources of revenue for the Nabataeans, the significance accorded the trade in the ancient writers as well as the considerable effort which the Nabataean kings put into encouraging and protecting the trade show that it must have been lucrative indeed. It would seem that when the Romans annexed the kingdom in A.D. 106 they acquired a territory in which the incense trade had some considerable significance, as well as considerable potential for revenue to be gained by the taxation of this trade. Although the Romans unquestionably stood to gain from the trade, we might reasonably expect the priorities of the Roman administration in Arabia to have been somewhat different to those of the Nabataean kingdom which preceded them.

III.4 Trade in Provincia Arabia in the Antonine Period

The Nabataean Kingdom came to an end and became the new Roman province of Arabia in A.D. 106. Although the exact circumstances are unknown, the annexation appears to have been at least relatively peaceful and may have taken place upon the death of the reigning king, Rabbel II, who had reigned since A.D. 71. The epitomator of Cassius Dio briefly records the event in the following words:
And at around the same time Palma, the governor of Syria, subdued Arabia about Petra and made it subject to the Romans.\textsuperscript{173}

Upon or soon after this invasion, the kingdom appears to have been organised as a province governed by a senatorial legate with a garrison of a single legion. In keeping with the greater importance of the northern part of the kingdom during the later first century A.D., the governor appears to have been based at Bostra,\textsuperscript{174} and the remains of a legionary camp indicate that the legion was based there too.\textsuperscript{175}

This annexation has sometimes been viewed as the culmination of Petra’s decline, and the point at which its trade, such as had survived the first century, ceased altogether. As we have seen, however, the case for the decline of Petra’s trade in the first century is greatly overstated, and accordingly it will be pertinent to see whether or not the Roman annexation caused the trade of Petra to disappear, or affected it in any other way.

\textit{The Annexation of the Nabataean Kingdom}

The reason for this annexation is never explicitly stated, but some have been quick to ascribe commercial motives to the Roman takeover. Here once again the perennial ‘middlemen’ emerge: to many, the annexation of the Nabataean kingdom is the removal of the Arabian ‘middleman’ in the spice trade;\textsuperscript{176} it is seen as the final act in the drama which began with the expedition of Aelius Gallus 130 years before. As

\textsuperscript{173} Dio Cassius LXVIII. 14. 5  
\textsuperscript{174} M. Sartre Bostra: des origines à l’Islam (Paris 1985), 76-78.  
\textsuperscript{175} D. Kennedy & D. Riley Rome’s Desert Frontier, 124-125. 

has already been noted, however, this explanation seems extremely dubious. If the Romans had desired to remove the ‘Arabian middleman’ they could have done it long before; indeed military expeditions had previously been started against the Nabataeans, although not for commercial motives. If the Romans had had such a strong desire to be rid of the ‘middlemen’, they would assuredly not have allowed these opportunities to slip away but would have annexed the kingdom at that time. Similarly, this shows that the Romans did not annex the kingdom to possess its wealth; if they had wanted to do that, the kingdom would have been invaded many years before A.D. 106.

Such ‘commercial motives’ for the Roman annexation also fail to recognise that there is no identifiable commercial disadvantage to Rome in allowing the Nabataean kingdom to survive. Just as in an earlier section it was shown that the Romans had no good reason to weaken the Nabataean kingdom for commercial reasons, there is equally no good reason for them to have annexed it for commercial reasons. Even if it could be proved that the Romans would act from commercial motives like these, there is no coherent rationale that can be adduced for such an act. The suggestion of a commercial motivation for the acquisition of the Nabataean kingdom must be rejected for the same reasons, outlined earlier, that a deliberate Roman policy aimed at weakening the kingdom in the first century should be rejected. Like all client kingdoms, the Nabataean realm had a precarious existence: its continued survival from the time of Pompey up until A.D. 106 is sufficient testimony to the fact that the

176 J.-P. Rey-Coquais “Syrie romaine”, 54.
177 Tiberius had ordered Vitellius, the governor of Syria, to make war upon Aretas IV because of the latter’s attack on Herod Antipas late in Tiberius’ reign, but the action ceased upon Tiberius’ death (Josephus, AJ XVIII. 109-125).
Romans did not wish to destroy the kingdom during that period. Simply put, if they had had such a desire, the Kingdom would not have lasted as a Roman client for nearly 170 years.

Roman client kingdoms existed in the East because they fulfilled some role which the Romans either could not or did not wish to do. By the end of the first century A.D. most of these kingdoms had been incorporated into the provincial system. The persistence of the Nabataean kingdom in these circumstances shows clearly that it was not viewed as an economic rival by Rome, but as a useful vassal. However, toward the end of the first century and into the second it seems that the Romans wished to incorporate the remaining client states, and so (presumably) upon the deaths of their respective kings the kingdoms of Herod Agrippa II and of Rabbel II were annexed by Rome.

Whether or not the decision to annex Petra was planned in advance to take place on the death of Rabbel, or, as has been recently suggested, took place in response to disturbances in the kingdom at that time, we cannot tell. It is clear, however, that the decision to invade would have been occasioned by political or military considerations of some sort, not by any commercial motive. Under Trajan, Rome pursued an expansionist policy: Dacia and Parthia were attacked in major campaigns, while, as has been noted, client states such as the Nabataean kingdom and

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178 S.E. Sidebotham Roman Economic Policy, 150.
179 III. 2 above.
180 For the system of client kingship in general see D. Braund Rome and the Friendly King: the Character of the Client Kingship (London 1984).
the kingdom of Herod Agrippa II\textsuperscript{182} were incorporated into provinces. There is certainly no need to look for any special commercial consideration in the annexation of Petra: rather, we should have expressed surprise had the kingdom not been annexed at that time in the light of Roman policy elsewhere. The annexation of the Nabataean realm may well have been thought militarily expedient in the light of the upcoming campaign against Parthia, as Graf suggests,\textsuperscript{183} or the internal situation in the Nabataean kingdom could have decayed to the extent that Cornelius Palma thought that Roman intervention was necessary to restore order.\textsuperscript{184} Certainly the unusual timing of the annexation, while Trajan was still engaged in Dacia, together with the apparently \textit{ad hoc} nature of the invasion force comprised of detachments of troops from surrounding provinces rather than a specially prepared invasion army, would suggest that the intervention was not planned and occurred in response to some crisis within the Nabataean kingdom.\textsuperscript{185}

Another consideration which could have affected the decision to annex the Nabataean kingdom is the possible lack of an heir to take over the kingdom on the death of Rabbell II. While there is evidence that Rabbell had a son, Obodas,\textsuperscript{186} it may be that he had either predeceased Rabbell or was not of age, or otherwise considered

\textsuperscript{182} This kingdom may have been annexed prior to the reign of Trajan. See J.-P. Rey-Coquais “Syrie romaine”, 50; R.D. Sullivan “The Dynasty of Judaea in the First Century” \textit{ANRW} II. 8 (1977), 344.


\textsuperscript{184} P. Freeman “The Annexation of Arabia”, 93-102.

\textsuperscript{185} Ibid.

\textsuperscript{186} The existence of this son is attested by numismatic evidence from Rabbell’s reign. See Y. Meshorer \textit{Nabataean Coins}, 78. He is also mentioned in papyri from the Archive of Babatha, a collection of legal papyri dating from the reign of Rabbell II and the early years of the province before the Second Jewish War. See Y. Yadin “Expedition D - The Cave of the Letters” \textit{IEJ} 12 (1962), 239-240; Y. Yadin “The Nabataean Kingdom, Provincia Arabia, Petra and En-Geddi in the Documents from Nahal Hever” \textit{Ex Oriente Lux} 17 (1963), 230.
unable to govern by the Romans.187 Indeed, the lack of an heir or some succession crisis coupled with an ageing king may have been sufficient to provoke the kind of unrest suggested by Freeman as the trigger for the Roman invasion.188 There are examples of client kingdoms reverting to provinces when no suitable heir was available even when the annexation of client kingdoms was not a matter of policy for the Romans: for example, during the reign of Claudius, Judaea was made a province after the death of Herod Agrippa I because Agrippa II was not yet of age.189 Thus it is altogether possible that the Romans may have decided that the time was right to annex the Nabataean kingdom after Rabbel’s death if there was no strong heir capable of taking over the kingdom, particularly if there were severe disturbances over the succession.

Regardless of the exact reason for the Roman action, we can be assured that it would have been military or political reasons which motivated them. There is no coherent case to be made for a mercantile motive. There is no evidence that the Nabataeans were siphoning off Roman profits, nor that they were reaping taxes which would otherwise have accrued to the Roman treasury, or indeed financially affecting Rome or Roman interests in any way. As has been noted, client kingdoms existed because the Romans decided to keep them for a purpose. Once that purpose no longer existed, or could be performed better by direct Roman rule, the kingdom would be annexed. It is just such a fate that befell the Nabataean kingdom in A.D. 106.

187 S.E. Sidebotham Roman Economic Policy, 150.
188 P. Freeman “The Annexation of Arabia”, 100-102.
189 Josephus AJ XIX. 362; BJ II. 200
Whatever the reason for the Roman annexation of the Nabataean kingdom was, it seems that the takeover in no way affected the continuance of the incense trade. Indeed, some measures taken by the Romans soon after the occupation may even have had a positive effect on trade, although it is debatable that this was their intention. One thing which should be particularly noted at this point is the reluctance of the Romans in most cases to bring in their own innovations when they took over control of an area. Generally speaking they were content to allow local institutions to continue as much as possible while causing as little disruption as necessary to provincial life. The new Province of Arabia would seem to have been no exception. Many developments which have been put forward as evidence of Roman "provincialization" can now be shown to have occurred either before or after the annexation, while other developments such as the replacement of Aramaic by Greek in legal documents of the province would have been made necessary simply by the fact that the Roman governor could not read Aramaic. Indeed, it may well be argued that little changed in Arabia in A.D. 106-114 apart from the replacement of the King with a representative of the Emperor and the disbandment of the Nabataean army. In this climate, it would be difficult to imagine the Romans deliberately taking any action which would disrupt the patterns of long-distance trade in the province, particularly when that trade would no doubt bring significant funds to the treasury by the imposition of taxes and duties. Rather, their behaviour in other areas of the annexation would seem to indicate that the Romans would have allowed the trade to continue.

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unmolested, only ensuring that now the merchants paid their dues to the representatives of Rome instead of the King.

Perhaps the most significant act undertaken by the Romans on their annexation of the kingdom was the construction of the *Via Nova Traiana*, a new road which ran from Bostra to Aila. As has been noted, this route was not an innovation but followed the path of a pre-existing caravan route which had long been used by the Nabataeans.\(^1\) Milestone inscriptions make it clear that this construction went hand in hand with the creation of the province; indeed, by the time coins commemorating the annexation appear, the road was largely finished.\(^2\) The milestones state that the road was constructed and Arabia was converted to a province at the same time, under the governorship of Claudius Severus who presumably took over command when Cornelius Palma had returned to Syria, or at least when a separate Arabian command was created distinct from the province of Syria.\(^3\)

\[
\text{Imp. Caesar} \\
\text{Diui Neruae f. Nerua} \\
\text{Traianus Aug. Germ.} \\
\text{Dacicus Pont. Max.} \\
\text{Trib. Pot. XV Imp. VI Cos. V} \\
P. P. redacta in formam prouinciae Arabia uiam \\
noeam a finibus Syriae \\
usque ad Mare Rubrum \\
aperuit et strauit per \\
C. Claudium Seuerum \\
leg. Au[. g. pr. pr.]
\]

2. G.W. Bowersock *Roman Arabia*, 83.
3. The formula "redacta in formam prouinciae" in the inscription probably refers not to a formal organisation of the former kingdom as a province, but rather the creation of a separate Arabian command in c. A.D. 111-114 at the same time as the road was built. The decision to create this command (and build the road) may have been taken after the initial military intervention of 106, which might only have been intended as a temporary intervention rather than an annexation. See P. Freeman "The Annexation of Arabia", 114. For the governorship of C. Claudius Severus and the provincial *fasti* see W. Eck *Senatoren von Vespasian bis Hadrian: Prospopographie Untersuchungen mit Einschluss der Jahres- und Provinzialfasten der Statthalter* (Munich 1970), 166-167, 235.
The Emperor Caesar . . . Traianus Augustus . . . , when Arabia had been transformed into a province, opened up and paved a new road from the borders of Syria as far as the Red Sea by C. Claudius Severus, governor.¹⁹⁴

A considerable amount of scholarly attention has been devoted to explaining the reason for the construction of this road. The answer to this question is, of course, closely related to the reason for the annexation and for the presence of Roman troops in Arabia. The question of Roman military involvement in the former Nabataean kingdom will be examined and an explanation for the Roman presence in this area suggested further on in this chapter.¹⁹⁵ For now, however, it will be enough to notice the effects that the construction of the road had on trade in the region, and to what extent trade can be shown to have still been a vital part of the economy of the province of Arabia.

The view that trade had declined or disappeared in the Nabataean kingdom before the annexation also implies that Petra, the major centre for trade in the kingdom, had lost its importance by that time. Following this viewpoint, there has been a prevailing view that the Via Nova bypassed Petra, only connecting it to the main route by a side road.¹⁹⁶ This theory takes the view that Petra had declined in importance due to its loss of trade, and had been supplanted in political importance by Bostra. David Graf, however, has shown that Petra was most likely on the main route of the Via Nova, and this testifies to its continued importance at this time.¹⁹⁷ Graf shows that Petra’s place on the main route of the Via Nova is proved by a

¹⁹⁴ CIL III. 14149, 21
¹⁹⁵ III. 5 below.
number of things: first, the representation of Petra on the main North-South route through Arabia on the *Tabula Peutingeriana*; then the continuing importance of Petra as reflected in its receiving the title *metropolis* before Bostra and its use as the seat of the Roman assizes; and the existence of Roman road remains immediately to the north of Petra which are of the same width and arrangement as the *Via Nova* between Amman and Bostra. To this can be added the fact that there is inscriptive evidence of military personnel stationed at Petra itself in the Roman period, which attests to the continuing importance of the site and the necessity of protecting and monitoring traffic passing through the city.

Indeed, it would seem that as soon as the road was put into place merchants were quick to exploit it and the opportunities presented by the integration of the Nabataean kingdom into the Roman provincial system. As was mentioned earlier, there is both physical and literary evidence that merchants had used this route well before the arrival of the Romans, and it is difficult to believe that merchants would not take advantage of the new road once it was finished. Indeed, a preserved papyrus letter from one Julius Apollinarius, a legionary stationed at Bostra, mentions that soon after the Roman annexation merchants were arriving at Bostra from Pelusium in Egypt every day. It seems clear that these merchants saw considerable new opportunities in the province of Arabia at this time. Although we are not told what

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197 D. Graf "The Via Nova Traiana in Arabia Petraea", 242-244.
198 For the *TP* see II. 1 above; for the *TP* with respect to Arabia see G. Bowersock *Roman Arabia*, 164-186.
199 As attested on the inscription from the triumphal arch in Petra. See G. Bowersock *Roman Arabia*, 84-85 & *JRS* 72 (1982), 198.
201 D. Graf "The Via Nova Traiana in Arabia Petraea", 243-244.
203 *P. Mich.* 466
type of merchants these were, nor what it was they were interested in, it is
nonetheless true that their presence implies that trade in the Nabataean kingdom had
not come to a standstill either before or upon the Roman annexation.

Indeed, the presence of these merchants indicates that the opening of the *Via Nova*
may well have had some important effects upon the patterns of long-distance trade in the province. The construction of a road along an already used caravan route and its provision with guard posts and caravanserais\(^\text{204}\) would no doubt have attracted merchants, and this may have affected the use of such alternative routes as the Petra-Gaza road. Traffic coming up the incense road which until the construction of the *Via Nova* would have generally used the roads across the Negev might after that time have chosen to come up the *Via Nova* into the Decapolis and thence to the Mediterranean.\(^\text{205}\) Thus we may view this trade also as possibly contributing to the rising prosperity of the Decapolis cities at this time,\(^\text{206}\) along with the trade from the Wadi Sirhan discussed earlier. It would seem then that the trade which had existed under the rule of the Nabataean kings continued to be active under Roman rule: indeed, it is very possible that integration into the Roman provincial system brought commercial advantages and stimulated trade. Certainly it seems that the merchants from Pelusium thought that this would be the case.


\(^\text{205}\) As noted earlier, the roads across the Negev were nonetheless used and garrisoned in this period, which shows that trade was probably still using these routes. See R. Cohen "New Light on the Date of the Petra - Gaza Road", 243-246.

The Roman Post at Hegra

The continuing importance of trade in the new province is further demonstrated by the Roman garrisoning of the outpost at Medain Saleh. While some have doubted the assertion that this region was actually a part of the Roman province, it is undoubtedly the case that Roman troops were stationed in the region, as their presence is attested by numerous inscriptions in the area of Medain Saleh. Whether or not one wishes to adduce this as evidence of the area comprising part of the province, it unquestionably signals Roman control of at least Medain Saleh and the route to it from the province.

These inscriptions attest the presence of at least two Roman alae, and show that the location was probably occupied immediately upon annexation in A.D. 106 and continued to be manned up until the fourth century. The graffiti were initially recorded by Jaussen and Savignac and have since been recorded and commented upon by several others. Seyrig dated these inscriptions to the later second century, but Speidel has pointed out that one of the units attested, the ala ueterana Gaetulorum, seems to have been in Arabia certainly by the time of Marcus Aurelius. Indeed, the

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208 The whole question of whether or not this area was formally a part of the province may in fact be unnecessary. Isaac has pointed out the fact that, while the Romans thought of internal boundaries between provinces, they never thought of the area outside frontier provinces as being outside Roman control or outside the “Roman Empire” (B. Isaac Limits of Empire, 119, 394-397). The idea of Medain Saleh being a place outside the Roman Empire yet garrisoned by Roman troops would probably have been inconceivable to the Romans: if there were Roman troops there then it was part of the Imperium Romanum by that fact alone.


210 H. Seyrig, “Postes romaines sur le route de Médine”, 223.

211 M.P. Speidel “The Roman Army in Arabia”, 706.
fact that this unit was in Judaea prior to the annexation of Arabia (as is shown by a
diploma of A.D. 86)\textsuperscript{212} makes it quite likely that it was transferred to Arabia either at
the time of annexation or very soon afterward.\textsuperscript{213} The military occupation of the site
seems to have continued until perhaps a little before the time of Caracalla, as the lack
of the \textit{nomen} Aurelius amongst the inscriptions indicates that the series stopped
before then.\textsuperscript{214} Certainly they were gone by the time of the composition of the \textit{Notitia
Dignitatum}, which does not mention this post. In addition to the two \textit{alae}, an
inscription mentioning the painter of the province’s legion, the \textit{III Cyrenaica},\textsuperscript{215}
raises the possibility that a portion of that unit may have been based at Medain Saleh
also. Thus it is clear that in Roman times, for most of the second century A.D. at
least, there was a considerable garrison based at this remote outpost. The inscriptions
are grouped together rather than widely scattered,\textsuperscript{216} which makes it more likely that
the units were based there rather than simply passing through the site.

The presence of these units is clear evidence of the continued importance of
the trade coming along the old ‘incense route’. Just as in the Nabataean period
discussed earlier, it is very difficult to see the point of stationing troops at this remote
locality unless it was for the purposes of protecting the caravan traffic. Although it is
certainly true that at certain times, most notably in the Severan period, the Romans
placed stations of troops at great depth into the desert, it still must be assumed that
these troops were there to guard an important route, not just placed randomly in the
desert. We know of no other Roman interest in the area other than the caravan traffic,

\textsuperscript{212} ILS 2544
\textsuperscript{213} J. Bowsher “The Frontier Post of Medain Saleh”, 25-27.
\textsuperscript{214} D. F. Graf “Qura ‘Arabiyya”, 194.
\textsuperscript{215} T. Barger “Greek Inscription Deciphered” \textit{Archaeology} 22 (1969), 139-140.
and there is no concrete evidence that this region was the approach route of any nomadic invasions or raids.\textsuperscript{217} We do, however, know that the route passing through Medain Saleh was important because of the trade in frankincense and myrrh, and it is in this light we must attempt to understand the Roman garrisoning of this post. It should be remembered that Medain Saleh had been held with a considerable garrison by the Nabataeans from at least A.D. 1-75, and again by the Romans probably from A.D. 106 perhaps down to the fourth century, but certainly into the Severan period. Moreover, the Roman garrison was a considerable force, consisting of two $\textit{alae}$ and possibly a legionary detachment. This was no small listening post to keep an eye on the nomads, but rather a significant station guarding traffic along an important route. The only plausible explanation for the importance of that route would appear to be based upon the continuing importance of the trade in frankincense and myrrh. The military remains from the Eastern Desert of Egypt show clearly that the Romans were willing to expend considerable effort in protecting the routes which this valuable commerce used,\textsuperscript{218} and it would appear that the Roman station at Medain Saleh is another case in point.

\textit{Conclusion}

It is clear that, regardless of the actual Roman motivation for the annexation of the Nabataean kingdom and the construction of the \textit{Via Nova Traiana}, merchants made use of the opportunities presented by these events to further their commerce,

\footnote{A. Jaussen \& R. Savignac \textit{Mission II, 644-649}}

\footnote{Indeed, despite the assertions of many scholars, there appears to have been no 'nomadic threat' of invasion at any time prior to the Islamic conquest. See III. 5 below.}
and that the trade which had been an important part of the livelihood of the Nabataean kingdom continued to pass through the Roman province. There is no support to be found for the notion that Petra was in decline at this time, either before or after the Roman takeover, nor that the trade upon which it had relied for its livelihood had moved or had been moved elsewhere. Indeed, there is every reason to believe that the Province of Arabia, and specifically the commerce within it, benefitted from the annexation and from the construction of the *Via Nova* which followed. The presence of merchants at Bostra, the continuing importance of Petra and the continued garrisoning of Medain Saleh and the Petra-Gaza road show clearly that the Arabian incense trade remained a significant factor in the economy of the Roman province of Arabia for some considerable time after the annexation.

III.5 The Caravan Trade and the Roman Military in Arabia

Although there is relatively little evidence with which we may reconstruct the significance of the incense trade within the Nabataean kingdom, it must be said that there is still less whereby we may study the trade in the Roman province of Arabia which succeeded it. All the literary evidence which we have touching on the trade deals with the royal period, so this avenue of exploration is closed as regards the Roman administration of the area. What little documentary evidence of the Roman administration of the province that survives tells us nothing of the trade either, so it would seem that the significance of the incense trade in Roman Arabia might be a somewhat fruitless area of study.

218 II. 4 above.
Despite this, the archaeological remains of the Roman occupation of Arabia do provide some assistance in this study. By an examination of these, we may perhaps gain some insight into whether or not the Roman administration of Arabia attached any significance to the caravan traffic, and if so, to what extent the needs of the caravan trade were allowed to dictate Roman policy in the area.

*The Trade and the Roman Administration in Arabia*

In the absence of any documentary evidence of the sort that is present in Egypt and Palmyra, the best indicator of possible Roman interest in the trade is that of military posts. Some of these stations, located in exceedingly remote areas of the deep desert such as that at Medain Saleh, have already been discussed. Such stations do not seem to have any rational explanation for their existence apart from the protection of the caravan traffic. While it must be emphasised that there is really very little evidence on which to make conclusions, the presence of these military posts in the deep desert, far from any other Roman interest, would seem to indicate that the Roman administration was prepared to spend a reasonable amount of money and effort to protect the caravans coming up from southern and eastern Arabia.

While the Romans did abandon some stations which had been maintained by the Nabataeans, generally speaking they seem to have take over most of the duties of caravan protection and such like formerly performed by the Nabataean army. It is thus certainly the case that the Romans did not wish to let slip such a lucrative source of income as the incense caravans undoubtedly represented. In this, their attitude appears to be not unlike the policy they adopted in Egypt as outlined earlier in this
work: that is, the caravans were seen chiefly as a source of imperial income, and the military protection of the caravans was designed to ensure that the trade continued to flow freely and the merchants continued to pay their dues to the imperial treasury.219

It should at this point be noted that such interest in the protection of the incense caravans does not have to be ascribed to anything like an 'economic policy': the Roman posts such as Medain Saleh and Jawf in the Wadi Sirhan were on already existing caravan tracks, taking over stations which had been occupied by Nabataean troops before them. There is no evidence of any attempt to channel the traffic, or to establish new routes, or any similar proactive measure. Rather, the Romans seem to be acting to protect an economic resource (i.e. the levies from the caravans) which was already in place. Despite the fact that the Romans clearly did show an interest in the trade, we do not have to surmise any more complicated an economic policy than the simple desire to collect the tolls which the caravans paid as they traversed their accustomed routes.

The Limes Arabicus

A particular area of the Roman military presence in Arabia which has aroused considerable controversy over its exact purpose has been the system of fortifications and roads in the province of Arabia which has become known as the Limes Arabicus. There are significant remains in the Jordanian desert of a complex system of roads,

219 See II. 4 above.
forts and watchtowers generally following the line of the *Via Nova Traiana* running from Bostra to the Red Sea, which was constructed soon after Arabia’s annexation as a province in A.D. 106. The great majority of datable remains in the fortification system are from the Later Roman and Byzantine periods, during which time there appears to have been a substantial garrison in this area consisting of perhaps three legions. Nonetheless there are some remains which seem to date from the earlier period of the Roman province.

It has been argued that these fortifications were built as a response to the depredations of nomadic tribes living in the desert to the east of the *Via Nova*. This explanation takes the view that the Roman troops in the province of Arabia were primarily there to defend the sedentary inhabitants of the province from the threat of attack by those who were both outside the Empire itself, living in the desert outside Roman domination, and outside the system of sedentary farming found in the cultivatable areas of the province: that is, the desert nomads. While it is allowed that some transhumance may have taken place whereby the nomadic tribesmen were able to cross into the cultivated area behind the forts to graze their flocks while the fields were uncultivated, this is envisaged as only being possible under the watchful eye of the Roman authorities who carefully regulated the movements of these nomads by means of the forts and watchtowers along the edge of the cultivated zone.

This we might regard as the ‘traditional’ viewpoint, strongly favoured by Parker and also by many others, which accords with Luttwak’s view of an imperial

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221 S.T. Parker *Romans and Saracens,* 143-148, 158.
grand strategy of defensive frontiers (in the later period), aimed at excluding the enemies of the Empire and preventing their attacks.\textsuperscript{224} Accordingly, whether or not the \textit{Limes Arabicus} actually conforms to this view has some implications for the current debate over the existence of an imperial grand strategy and the nature of the Roman frontier.\textsuperscript{225} Thus, we will examine certain aspects of the Roman military presence in Arabia to see if they in fact conform to the traditional model, and, if not, to attempt to determine what the forts \textit{were} for and what influence the caravan commerce of the region might have had on this military presence.

\textit{Nature of the Limes Arabicus}

The ‘traditional’ viewpoint sees the Arabian \textit{Limes} as essentially a \textit{latitudinal} barrier: it is chiefly designed to control and monitor the movements of nomads across the line of fortifications and to prevent raids by the desert dwellers into the area inhabited by sedentary farmers within the province. It follows from this that the \textit{Via Nova} was primarily intended as an artery of communication between these fortifications, allowing quick communication between the forts and rapid deployment.

\textsuperscript{222} Ibid., 6-8.
\textsuperscript{223} S.T. Parker Romans and Saracens, 8.
\textsuperscript{224} E.N. Luttwak \textit{The Grand Strategy of the Roman Empire} (Baltimore 1976).
\textsuperscript{225} For the ‘traditional’ view, that the Roman Empire possessed a grand strategy which gradually evolved into a system of fixed defensive frontiers, see (with reference to the eastern frontier) E.N. Luttwak \textit{Grand Strategy}; S.T. Parker \textit{Romans and Saracens}; A. Ferrill \textit{Roman Imperial Grand Strategy} (New York 1991); A. Ferrill “The Grand Strategy of the Roman Empire” in P. Kennedy (ed.) \textit{Grand Strategy in War and Peace} (New Haven 1991), 71-85; E.L. Wheeler “Methodological Limits and the Mirage of Roman Strategy” \textit{The Journal of Military History} 57 (1993), 215-240. For the more recent view that there was no real ‘Grand Strategy’, and that the Romans determined strategy in a more \textit{ad hoc} (and generally more aggressive) way, see B. Isaac \textit{The Limits of Empire}; C.R. Whittaker \textit{Frontiers of the Roman Empire: A Social and Economic Study} (Baltimore 1994); C.R. Whittaker “Where are the Frontiers Now?” in D.L. Kennedy (ed.) \textit{The Roman Army in the East}, 25-40.
of troops to any area in which they might be needed along the frontier.\textsuperscript{226} The nomads are seen as essentially hostile, and presenting a constant threat to the sedentary inhabitants of the province; their raiding is only kept in check by the watchful Roman troops in their fortifications.

However, there are several reasons why this interpretation must be called into question. The first area which will be examined is the role and nature of the \textit{Via Nova Traiana} and the fortifications along it and to the east of it. These fortifications are distributed along two roads: in the south, between Udruh and the Red Sea, there is only the line of the \textit{Via Nova} which has a series of road stations which were occupied by the Romans upon the annexation of the province in A.D. 106.\textsuperscript{227} Further north, there is another road to the east of the \textit{Via Nova} which branches off the main route south of Udruh and continues north at least as far as the Wadi el-Hasa, and very possibly further into the central region of the province.\textsuperscript{228} The \textit{Via Nova} itself is generally unfortified in this region, with the exception of a few widely-spaced roadstations which appear to have been garrisoned by the Romans soon after the annexation.\textsuperscript{229} The eastern route, however, has many forts. The forts on this route mostly date from the later third century, but there is evidence that traffic used this

\begin{thebibliography}{99}
\bibitem{226} S.T. Parker \textit{Romans and Saracens}, 8.
\bibitem{227} Surface sherding at the sites of Humeima, Khirbet el-Khalde and Khirbet el-Kithara revealed pottery from the early second century through to the Byzantine period, while Humeima and Khirbet el-Khalde also showed evidence of Nabataean occupation. See D.F. Graf "Nabataean-Roman Military Sites in Southern Jordan", 126; S.T. Parker \textit{Romans and Saracens}, 104-112.
\bibitem{228} B. Isaac "Trade Routes to Arabia and the Roman Presence in the Desert" in T. Fahd (ed.) \textit{L'Arabie préislamique}, 247-248. The road is attested by milestones as far as the Wadi el-Hasa, but Isaac feels that it would have continued further north, linking up the forts in the central part of the province.
\bibitem{229} The site of Muhattet el-Haji, for example, has sherds from the Nabataean period right through to the Byzantine period. See S.T. Parker \textit{Romans and Saracens}, 55-58.
\end{thebibliography}
road as early as the second century. Thus, with the exception of a few roadstations generally located in the south, it would seem that both the Via Nova and the other roads within the province were largely unfortified for the best part of two centuries before an elaborate system of fortifications was constructed in the later part of the third century.

It would thus seem most unlikely that the Via Nova was intended to be a defensive frontier when it was first built, regardless of what it may have become later. As has been noted, the road was built as soon as the province was annexed, and furthermore it was constructed over a Nabataean caravan track which was already in use in A.D. 106. The forts, however, apart from a few exceptions, were not built until much later. It is clear from this that when the Romans originally built the Via Nova they had intended it as a route for communication, not as a latitudinal barrier against the desert nomads. Indeed, it would probably be better not to think of the Via Nova and its associated roads in this period as a frontier at all. Certainly in places it ran near the edge of the populated and cultivated area, but in doing so it followed a very ancient route which was still in use as a caravan track when the Romans took over the Nabataean kingdom. It would seem most likely that the Romans took over this path and improved it, but retained its original use as a caravan track, to which they added their own administrative requirements. The theory that the Romans built this road as a defensive frontier is not tenable given the fact that on substantial stretches of the road there were no fortifications for a great many years. It is indeed

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230 Forts at Qasr eth-Thuraiya, Qasr Bshir, Ziza and the legionary fortress at Lejjun (as well as several other sites) all have yielded sherds datable from the third century down to Byzantine times, but show no trace of occupation in the second century A.D. See S.T. Parker Romans and Saracens, 45-58.

231 III. 4 above.
obvious that the Romans wished to use this road not as a latitudinal barrier but as what it had always been, a longitudinal route.

The uses for such a route would have been considerable, and there is probably no one pre-eminent purpose for which the road was employed, but rather a number of uses. As a military road it could provide access to the legionary base at Bostra for any troops in the south of the province, while as an administrative route it could provide rapid and protected communication from one end of the province to the other. Besides these uses, it is also possible that the Romans were interested in the control and protection of the valuable caravan traffic which was using this route. It is noteworthy that of the small number of forts which were garrisoned immediately upon the Roman takeover (see map), several of them are those on the line of the *Via Nova* south of Petra, such as Khirbet al-Khalde, Quweira and Humeima. As has been noted, these sites have pottery evidence of occupation by Roman troops from soon after annexation until well into the Byzantine period.\(^2\) Much of the road north of Petra, however, was left unfortified until at least the Severan period. It is interesting to note that the section of road south of Petra which was equipped with Roman posts immediately upon annexation, replacing units of Nabataean soldiers,\(^3\) was precisely that section which would have carried the incense caravans to Petra. As can be seen from Map III. 3, the Petra-Gaza road was in use and fortified immediately upon the Roman takeover.\(^4\)

\(^{2}\) S.T. Parker *Romans and Saracens*, 104-112.
\(^{3}\) D.F. Graf “Nabataean-Roman Military Sites in Southern Jordan”, 126.
\(^{4}\) R. Cohen “New Light on the Date of the Petra - Gaza Road”, 240-247.
Please note that the date assigned to each site is not the date of the current construction at the site but the date of the earliest Roman occupation of the site based on pottery or inscriptive evidence.
In this way, the entire route taken by the incense caravans from Aqaba to Petra and thence to Gaza was provided with road stations reasonably close together, whereas the remainder of the *Via Nova* was not so intensely fortified. Thus, it may be that the initial Roman military deployments along the southern *Via Nova* were primarily intended to protect the incense caravans as they made their way north toward Petra and from there to the Mediterranean. Indeed, this would seem to be the most likely explanation for the initial Roman military preoccupation with the southern part of the road. This area (the Hisma) is quite barren and sparsely inhabited, so policing or administrative roles for the posts can safely be rejected, particularly considering the general absence of similar posts along the remainder of the road. It would thus seem that in this instance the caravan trade was of sufficient interest and value to the Romans that it was felt important to replace the Nabataean garrisons upon annexation so that the caravans with their expensive cargoes would not be left unguarded.

With this in mind it is instructive to compare the Roman installations in Arabia with those in the Egyptian Eastern Desert discussed earlier. While the Egyptian forts are generally earlier in construction, they are in most cases very similar and thus it is quite likely that the forts in Arabia were designed for similar functions. This can be appreciated by an examination of the design of the forts, which show a close similarity of design with forts from both Egypt and Arabia. The similarity in design makes it quite likely that the intended purpose was the same.

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235 B. Isaac *The Limits of Empire*, 201. The unsuitability of Roman ‘frontier works’ in the East (including Arabia) as a defensive frontier is one of the central theses of Isaac’s book, and the following arguments owe much to his work.
The forts which comprise the two fortification systems were also similarly placed: that is, along longitudinal routes, designed to protect traffic along those routes. In both cases they are distributed along one route, with the forts spaced at somewhat less than one day's journey apart, varying between 16 and 30 km depending on the particular road in question. Thus, in both cases they are clearly stations along a route, not an exclusionary barrier, as they are separated from one another by considerable distances and could easily have been penetrated by a hostile force. As has been discussed, the Egyptian forts were intended to protect important and valuable traffic both from the Red Sea ports and from the quarries in the Eastern Desert; it is thus likely that similar traffic in Arabia, such as the incense caravans from southern Arabia, was a reason for the existence of similar forts on the *Via Nova* and associated roads. Even the later forts in Arabia can be shown to have similar characteristics, although grouped closer together in an area to the east of the main road. These do not have to be taken as a 'defensive frontier' either, as they are grouped along a route to the east of the *Via Nova* and are probably intended to protect communications along that route. During the period of the Tetrarchy the area under cultivation in Arabia was expanded further into the unsettled area, and these forts were more than likely constructed to protect communications along the route through the newly settled zone.\(^{237}\) The construction of these later forts may therefore simply be a reaction to a greater need for protection along the road in the later period, not to a fundamental change in the purpose of the fortification system in Arabia. The third and fourth

\(^{236}\) For drawings of the forts on the *Via Nova* see S.T. Parker *Romans and Saracens*, passim. For drawings of the forts on the road between Coptos and Quseir in Egypt see R.E. Zitterkopf & S.E. Sidebotham "Stations and Towers on the Quseir - Nile Road", 155-189.
century forts of Arabia are thus no more necessarily a defensive frontier than were the earlier forts along the southern *Via Nova* - in both cases the comparison with the forts and towers in Egypt show them to have been stations along a longitudinal route, not protective strongpoints along a latitudinal barrier.

Despite the clear points of similarity between the forts in Arabia and those in Egypt, M. Reddé and T. Bauzou have suggested that the two systems of fortifications are essentially different in character, and the reason they suggest for this is that the Egyptian fortifications are for the purpose of protecting the caravan traffic, whereas the Syrian route is intended primarily as an administrative and strategic road. The assumption that there was no caravan traffic on the *Via Nova*, however, is based on the argument, already shown to be false, that Petra experienced an economic decline prior to Roman occupation due to the loss of its caravan trade. In addition, Reddé and Bauzou base their comparison on the Roman road across the Ledja, north of Bostra, where the caravanserai-type forts found in Egypt are absent. On this section of road there are regularly spaced small towers, capable of containing a few troops but clearly unable to offer shelter to a substantial caravan. It may very well be that this particular route saw few if any spice and incense caravans, and the towers there should be thought of as police posts to protect general communication along the road rather than as caravan stations.

However, the comparison between fortifications does not hold true south of Bostra, as has been shown above. In this area there were significant caravanserai-type

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238 M. Reddé & T. Bauzou "Pistes caravanières de Syrie, d'Arabie et d'Égypte", 496.
239 Ibid. See III. 2 above.
forts able to offer shelter to caravans, and generally similar in design to the forts of the Egyptian desert. As can be seen on the map, this is particularly the case south of Petra, as well as on the Petra-Gaza road, although there are also some such forts on the Via Nova between Petra and Bostra. Caravans coming from Arabia Felix would traverse the road from Aqaba to Petra, from which they would then go either along the Petra-Gaza road, or continue along the Via Nova to Bostra and then turn off on the roads across the Decapolis to the Mediterranean seaboard. In either case, there would be no reason to use the road north of Bostra. Redde and Bauzou's argument concerning the different nature of these routes may well be true, but it only holds for the road north of Bostra, and certainly not for the Via Nova south of that city. In that area, by contrast, the similarities between the Egyptian routes and the Arabian ones is striking, making it probable that commercial traffic was a major reason for the existence of the Via Nova and the forts along it.

Therefore, from the design and location of the forts along the road it can be seen that the Via Nova Traiana was never intended as a defensive frontier, either to exclude or to control the inhabitants of the desert. Indeed, we might well question whether such a defensive system could have served any useful purpose at all, as the evidence that is often adduced to demonstrate the existence of these nomadic tribes which allegedly threatened the sedentary inhabitants of the province is deeply flawed. Thus, the role of the Limes Arabicus as a defensive frontier is called into question not only by the layout and function of the forts, but also by the apparent lack of an enemy against whom these forts might have been built. When the evidence is

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240 Ibid., 490-495.
examined, it will become clear that the ‘nomadic tribes’ were in fact transhumant pastoralists who lived for at least a substantial period of time within the province, and who operated within the cultural and political milieu of the Roman administration. What evidence, then, is there which could allow us to build up a picture of these nomads, and to determine whether or not they posed a threat to the province?

Nomads and Pastoralists in Roman Arabia

There is certainly some evidence from Classical literary sources and inscriptions which seems to refer to trouble with ‘Saracens’. Even though the accounts themselves do not specifically refer to widespread and severe ‘nomadic menace’, they have nonetheless on some occasions been taken to be symptomatic of a wider threat than simple brigandage. This, however, is not necessarily the case. Most of these accounts, in fact, do not have to be more than generic descriptions of ‘barbarians’ on the frontiers of Rome or references to purely local affairs rather than to any widespread campaigning. Even those that might refer to some difficulties with the desert inhabitants would probably refer more to very localised troubles rather than to a serious security situation requiring a significant military buildup. That

241 J. Euting Sinaitische Inschriften (Berlin 1891), 61-62, No. 463, a Nabataean inscription referring to the time the Arabs (?) destroyed the land; Chr. Pasch. p. 271, a fanciful account of the Emperor Decius releasing lions against the Saracens; Pan. Lat. 11 (3). 5. 4; 7. 1, referring to an expedition against the Saracens mounted by Diocletian; Eusebius Onom. X, referring to danger in the Amon gorge, although not specifying its nature; Rufinus HE II. 6; Socrates HE IV. 36; Sozomen HE VI. 38; Theodoret HE IV. 23, all speaking of the insurrection of Mavia, ‘Queen of the Saracens’, a Roman federate who rebelled and then renegotiated a peace in the reign of Valens; and Amm. Marc. XIV. 1. 4-7, a description of the Saracens which describes in terms common to the Roman description of the ‘generic barbarian’.

242 M. Sartre Trois études, 132; S.T. Parker Romans and Saracens, 132.

243 D.F. Graf “Rome and the Saracens”, 344-356. Graf deals in detail with all these Classical references, showing that none of them can be shown to represent a significant nomad threat to the settled inhabitants of the province.
there were some troubles cannot be disputed, as indeed there were some troubles in
virtually every border province of the Roman Empire. Thus, for example, we have the
Nabataean-Greek bilingual inscription from the Hisma, which seems to refer to a
Roman cohort defeating some enemy in the second century, presumably tribesmen
from the region.244 Also, we might note the role of several Severan outposts in the
Wadi Sirhan which seem, in part at least, to be designed to prevent the use of the wadi
as a route for raids.245 Such incidents as this, however, are not uncommon throughout
the whole area of Roman rule and are probably more to be thought of as troublesome
banditry than a sizable military threat from outside the Empire. Certainly, they
cannot be adduced as evidence for a strong nomadic menace which would justify the
construction of such extensive and expensive fortifications as the *Limes Arabicus*.

Indeed, if there were a significant nomadic threat to the inhabitants of the
province, it would be reasonable to expect many other fortifications than just the
military ones along the *Limes Arabicus*. One would expect the worried inhabitants of
Arabia to have erected strong walls around their towns, and to have concentrated their
activities on towns and areas near the forts for the sake of security. This, however,
does not appear to be the case. From the results of a survey of a part of the Wadi el-
Hasa, E.B. Banning has shown that a model of co-operative mutualism between
nomad pastoralists and sedentary agriculturalists explains the evidence far better than
does the hypothesis of hostility between these groups.246 In this study, it was found
that in the survey area there were widely scattered remains of camps, farmsteads,

244 R.G. Tanner "Greek Epigraphy in South Jordan" *ZPE* 83 (1990), 183-193.
245 See III. 6 below.
246 E.B. Banning "Peasants, Pastoralists and *Pax Romana*: Mutualism in the Southern Highlands of Jordan" *BASOR* 261 (1986), 44-45. See also S.T. Parker "Peasants, Pastoralists, and *Pax Romana*: A
small hamlets and villages as well as the more substantial towns. Furthermore, it was noted that there was no evidence throughout the area surveyed of any significant attempt at circumvallation at any of the sites. This is far more consistent with the model of mutualism than it is with that of hostility. If there indeed had been a severe threat from the nomads, one would have expected a few fortified settlements, but instead what we have is a pattern of widely scattered camps and farms, indicating relative peace in the area surveyed. It would seem, then, that generally speaking the relations between the nomadic pastoralists and the settled agriculturalists was a peaceful one. If there indeed was a substantial ‘nomadic threat’, the inhabitants of the Wadi el-Hasa seem to have been fairly unconcerned about it.

The model of peaceful and interdependent relations between pastoralist and agriculturalist in Roman Arabia has been substantially strengthened by Graf’s study of the Safaitic and Thamudic inscriptions of the Arabian and Syrian deserts. Despite the general lack of interest in these inscriptions by many historians, Graf’s work has shown that these inscriptions can in fact reveal a great deal of information about the nature of these ‘Saracen’ tribes in the Roman period. While the mere presence of these graffiti is occasionally taken as evidence of the existence of hostile tribes of nomads living in the desert, an examination of the actual content of the texts shows that this is not the case.

The texts in fact demonstrate that these people were considered in many cases as residents of the province, not as outsiders. For example, the tribe of the ‘Ubaishat


Ibid., 44.
appear not only in Safaitic inscriptions from the desert, but also in another inscription as the δῆμος of the village of Si' in the southern Hauran, within the province of Arabia. It is clear from these inscriptions that these transhumant pastoralists who travelled far into the desert were nonetheless regarded as the inhabitants of a town within the Roman province. In this case at least, the townspeople and the nomads who 'threaten' them turn out to be the same people! Similarly, members of the tribe of the 'Avidh, attested in several Safaitic inscriptions from northern Jordan, are mentioned as priests of a local temple at Deir el-Laban 40 km north of Bostra and as commanders of a local military contingent at Rama to the southeast: both, again, within the borders of the province. This pattern is repeated throughout the tribes found in the Safaitic corpus and it demonstrates that the view of the Safaitic tribes, and indeed of the 'Saracens' in general, as wandering, pillaging nomads is untenable. It is clear that these people were pastoralists who, though they left the province to graze their flocks in the desert at some times, were nonetheless a vital and integral part of the society and the economy of the Roman province. This is reflected in the inscriptions from the desert which express a desire to be 'at home' in the Hauran; that is, within the Roman province. 'Home' to these people was clearly not the desert but rather the towns and societies of the Hauran - indeed the very towns and societies

249 S.T. Parker Romans and Saracens, 115, 118-119, 131.
251 HCH 115, 146-148, 154
252 IGLS 2236, 2393, 2393b. See M. Sartre Trois études, 124-125.
254 Ibid., 368. See WH 402, 3289.
which the model of the 'nomadic threat' would ask us to believe were under threat from these tribes!

These inscriptions, then, show that the sedentary inhabitants of the Roman province of Arabia were not, generally speaking, under threat from the pastoralist 'nomads' who grazed their flocks both within the settled area and further out in the desert. It is clear that the Safaitic texts reveal a society very different from the model of hostile relations between the 'desert and the sown' favoured by Parker and others, but much more compatible with the model of mutualism and interdependency between pastoralist and agriculturalist put forward by Banning and discussed previously.

This is not to say, of course, that there were no 'real' nomads, that is, those who lived in the desert all or nearly all of the time and who looked upon the Romans and the inhabitants of the province as enemies. What it does indicate, however, is that the tribesmen who wrote the Safaitic and Thamudic graffiti were not such people. We do hear of such people as the nomads against whom the Palmyrenes were compelled to raise expeditions to protect their caravan traffic, but these cannot be taken as evidence for a substantial nomadic threat against the inhabitants of Arabia. The nomads who threatened the Palmyrene caravans were clearly only of sufficient strength to attack isolated groups of merchants in the desert: they were not capable of threatening Palmyrene territory in any way, much less the city itself. Moreover, Palmyra was able to keep them in check by means of what amounts to a city militia and some aggressive patrolling in the desert. This was a problem of brigandage, not a

\[^{255}\text{See IV below.}\]
substantial military threat. There is no parallel to be found here with a ‘Saracen menace’ to the provincials of Arabia.

Indeed, as has been shown above and as far as can be told from our evidence, these ‘Saracens’ were numbered among the inhabitants of the province, and the threat against which the forts of the *Limes* was built therefore was possibly not an external one at all. A further examination of the Safaitic inscriptions reveals that the threat the forts were designed to face was one of restive provincials, among whom were certainly the nomads who grazed their flocks in the desert part of the year, but also very likely the agriculturalists who spent all their lives within the boundaries of the province. A great many of these Safaitic inscriptions mention ‘rebellion’ or ‘flight’ from Roman authority: words which seem unusual for enemies of Rome, but certainly those that we might expect from a rebellious population. In one example, a member of the tribe of ‘Ubaishat mentioned above is recorded as having “reballed against the people of Rome”\(^{256}\), while many other inscriptions mention ‘flight’ and ‘escape’ from Roman authority.\(^{257}\) While these texts contain few clues to allow them to be dated with any accuracy, the preponderance of Roman fortifications in the region dating from the third century and later would seem to indicate that this is the period in which most of this unrest took place.

It is thus clear from the sources that among the residents of the province (and here there is no good reason to separate the pastoralist inhabitants from the agriculturalist) there appears to have been a considerable amount of flight from taxation or other responsibilities, and thus considerable unrest from among the

\(^{256}\) *NSIJ* 424

\(^{257}\) D.F. Graf “Rome and the Saracens”, 376.
provincials directed at the Roman administration, probably in the form of brigandage which would affect both the Romans as well as those provincial inhabitants who remained well-off. This unrest, as well as the internal nature of the problem, is illustrated by a Severan inscription from the road between Damascus and Emesa:

hoc proesidium construxit in securitatem publicam et Scaenitarum Arabum terrorem.

This fort was built for the public safety and as a terror to the tent-dwelling Arabs.\(^{258}\)

This fort is located many miles from the edge of the desert, well within the province, showing clearly that the Scenitae whom the Romans intended to intimidate were nomadic pastoralist inhabitants of the province, not raiders from outside. The problem being addressed here is clearly brigandage within the province, not an external threat. Certainly some of the brigandage would have come from outside the province, and those who lived most of their lives in the desert would have taken advantage of the unsettled conditions in Roman territory to raid and plunder. Nonetheless, we must refrain from ascribing the problem to an exclusively external threat, and recognise that much of the unrest came from within the province. It would seem most likely that the other forts of Roman Arabia were built with this type of threat in mind, and were intended to protect the communications of the Roman forces and the wealthy inhabitants of the province from the depredations of restive provincials who had begun to prey upon vulnerable travellers.

The forts of the *Limes* can therefore be seen to have been intended as protection for Roman communications and interests from restive inhabitants, both

\(^{258}\) This inscription is cited as *CIL* III. 128 by Rey-Coquais ("Syrie romaine", 66) and Isaac (*Limits of Empire*, 138) although the inscription does not correspond to this reference in the *CIL*. 329
from within the province and amongst those pastoralists who operated on the fringe of the cultivated area.259 Along with the vital military and administrative communications of the Roman army, there were also the incense caravans and the wealthier provincials which needed to be protected, providing a compelling reason for the construction of the system of forts in Arabia. By their presence, then, the forts of the *Limes Arabicus* could help the Romans in a number of ways. First of all, they could prevent interference by bandits and restive provincials with the apparatus of Roman government. Secondly, by making banditry more difficult they would help to preserve the Roman tax-base, which as discussed in the chapter on Egypt above was being eroded in the second and third centuries by increasingly large numbers of people turning to brigandage as a way of avoiding their onerous tax burdens. Thirdly, by protecting the remaining incense caravans they would remove from the brigands some of the richest prizes that would have been available to them, as well as maintaining the inflow of customs payments payable by the caravans. Naturally, the communications along the more remote areas and on the fringe of the cultivated area were the most vulnerable, and it is thus in these areas that we find the most forts, particularly in the later period when the unrest seems to have been at its most severe.

With this increasing unrest in the province can be detected a significant shift in emphasis for Roman troops in the area. As was noted earlier, in the early days of the province we find few forts, and those that we do find are mostly concerned with guarding the areas used by the caravans. In the later period, however, we find forts scattered along all areas of the road system in Arabia, particularly the more remote

and thus more vulnerable areas. This would seem to reflect a deteriorating security situation: in the early years, only the rich caravans, tempting targets for banditry at any time, required protection; but in later years when the province was far more restive all communications were vulnerable, banditry was widespread, and thus many more forts were constructed. Having seen, then, that the reason for the late third century fortifications of the Limes Arabicus was chiefly as a response to increased unrest and brigandage in the province, we might then very well ask ourselves why such unrest had arisen at this time.

The Situation in Third Century Arabia

Graf suggests that one reason for this increase in provincial unrest in the later period is the fall of Palmyra. Following Caskel, he suggests that the rebellion and then the destruction of Palmyra caused widespread disruption among all the provincial societies of the Roman East. He puts forward the theory that the disturbance of the Palmyrene revolt caused the Romans to suppress the use of Aramaic and other elements of local culture in Arabia, which in turn caused the unrest among the population of the province, both pastoralist and agriculturalist. The main evidence cited in support of this view is the apparent disappearance of Aramaic and pre-Islamic Arabic scripts from use in inscriptions at approximately this time. This does

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260 W. Casket “The Bedouinization of Arabia” in G.E. von Grunebaum (ed.) Studies in Islamic Cultural History (1954), 36-46. Casket stated that the destructions of Hatra, Dura Europos, Charax and Palmyra in the third century had the effect of removing the former Arab dependence upon caravan traffic and replacing it with a dependence upon brigandage. Graf (“Rome and the Saracens”, 392-400), while rejecting some of the theory, accepts that the destruction of Palmyra lay at the root of the disruptions of the third century, which themselves were the cause of the erection of the forts of the Limes Arabicus at that time. For a discussion of some of the effects of the fall of Palmyra see IV. 5 below.
not necessarily have to be the case, however. It may be the case that these languages dropped out of use simply because the major centres for their use no longer existed, or were no longer important (i.e. Hatra and Palmyra). While Aramaic may have been suppressed at Palmyra itself as it may have been regarded as a symbol of Palmyrene independence,\(^{262}\) it would seem unlikely that this was the case throughout Arabia. Indeed, Nabataean had dropped out of use far earlier: the legal documents of the Babatha archive indicate that Nabataean was replaced by Greek in legal documents almost immediately upon annexation, and it disappeared from use in inscriptions in the Nabataean heartland shortly afterward, only persisting in more remote areas of the former realm.\(^{263}\)

Thus, Graf’s linkage of the Palmyrene revolt with a deliberate cultural suppression of the local population of North Arabia does not seem to be entirely accurate. The only area in which this may possibly be shown to have been the case is in Palmyra itself, which by all accounts seems to have been an exceptional case. In contrast, the official use of the Aramaic language in Arabia seems to have passed out of use soon after the incorporation of the Nabataean kingdom into the Roman Empire, whether by a policy of deliberate suppression or simply by the necessity of using the common language of the eastern Empire we cannot tell. Indeed, Millar’s study of the societies of the Roman East shows that the almost immediate replacement of native cultural features, particularly language, by Hellenistic and Roman ones is almost

\(^{261}\) D.F. Graf “Rome and the Saracens”, 394-400.
\(^{262}\) See IV. 5 below.
\(^{263}\) D.F. Graf “Rome and the Saracens”, 394-395. The replacement of Nabataean by Greek may not indicate an official policy, however. It is more likely that the litigants wished to avail themselves of Roman law in their cases, and were thus forced to use Greek to make their depositions valid in a Roman court (and, presumably, so that the judge would be able to read them). See M. Goodman
universal throughout the East. The case of the former Nabataean realm is, in this instance, nothing unusual, and the link between the rebellion of Palmyra, the suppression of local culture in North Arabia, and the provincial unrest which caused the construction of the *Limes Arabicus* cannot be stated convincingly.

Nonetheless, the rebellion and subsequent destruction of Palmyra may well have had an influence on the rising unrest throughout Arabia. This rebellion, however, should be seen as a part of the wider economic pressures and unrest which characterised the whole of the third century, and are discussed elsewhere throughout this work. In the highly unstable political climate of the third century there appears to have been a significant shortage of money, which the Romans attempted to solve by debasement of the coinage and increasingly onerous taxation. In the context of the third century fortifications of Arabia, it is probably the increased taxation which is significant, as it would have turned many who were unable to meet their tax obligations to a life of “flight and rebellion” against Rome, as indeed we see reflected in the Safaitic inscriptions discussed above. Thus, the generalised economic pressures of the third century were very probably responsible for a great deal of displacement and brigandage in Roman Arabia. The situation in Arabia may well be seen as analogous to that which existed in Egypt, as discussed earlier, in which many villagers were displaced from their farms by the burden of taxation and instead took up a life of brigandage.

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265 II. 4 & 6 above.
These pressures, more than any particular results of the Palmyrene revolt, should be seen as the cause of the provincial unrest that existed in Arabia in the third century, and prompted the construction of the fortifications along the *Limes Arabicus* at that time. The Palmyrene revolt, the unrest in Egypt discussed in the previous chapter, and similar trouble throughout all the provinces of the Empire in the same period illustrate clearly the difficulties which beset the Roman world during this time, and such unrest is more than sufficient to account for the system of fortifications which was constructed in Arabia.

**Conclusion**

In an overview of the fortification system in Arabia we can discern an initial interest in protecting the caravan traffic coming from Arabia Felix giving way, in deteriorating economic and political circumstances, to a general concern about provincial unrest threatening Roman communication, tax collection and administration. As the parallel from Egypt discussed in the previous chapter shows, there is a link to be made between the protection of caravans and the suppression of banditry and tax-evasion generally, and thus we do not have to divorce one from the other. Rather, the more dire the economic circumstances became, the more attractive a prospect for brigandage the caravans would become, making a life of "flight from Rome", as many of the Safaitic inscriptions call it, more enticing than it might otherwise have been. In these circumstances the protection of caravans was a continuing priority, demonstrably so in Egypt and thus quite possibly in Arabia also.
The caravan trade cannot easily be dismissed from the reasons for the existence of the *Via Nova Traiana* or for the fortifications along it. In the early years of the province it appears to have been the main area for concern in the garrisoning of posts along the road, judging from the predominance of the southern section of the road between Aqaba and Petra in the fortification system taken over by the Romans in A.D. 106. In later years the economic situation grew more serious and there was a great deal of flight by the provincial inhabitants from Roman taxation and other responsibilities. In these circumstances brigandage, rebellion and general unrest seem to have become endemic. Roman communication, administration and tax-collection were under threat and so numerous posts were established throughout the province for the protection of these interests. As the situation in Egypt shows, however, the caravans could not be neglected in such circumstances as they would provide tempting targets for banditry. If they had been left unguarded imperial revenues from duties would have been affected, and greater incentive would have been provided to the struggling farmer to leave his land or flocks and embark upon a life of brigandage. Clearly the Roman administration would be keen to prevent either of these outcomes, and so as long as the caravan trade continued it would have remained a major concern of the Roman administration in Arabia.

III.6 The Significance of the Incense Trade in Roman Arabia

There is therefore considerable evidence of Roman military involvement in the protection of the caravan traffic throughout the period under consideration. Although it is indeed true that the military evidence is by far the most significant when it comes
to the Roman period, this is not to say that it is the only evidence. Even though other forms of evidence are rather sparse, there are still a few conclusions which we can reach concerning the nature of the participants of the trade in Roman times, as well as the broad economic significance of the trade in the Roman province of Arabia.

Traders in Roman Arabia

It is most probable that the traders of Roman Arabia were, with few exceptions, the same people as those who had handled the trade in the days of the Nabataean kingdom. In the Roman imperial period, however, we have even less evidence than in the preceding era, to the extent that we must simply assume the existence of the traders from the continued use of the trade routes as discussed earlier in this chapter. However, the fact that these routes did continue to exist makes it probable that the Nabataean merchants who had formerly operated these routes continued to profit by their trade. Also, the Nabataeans would still have been able to exploit their expertise with desert transportation and knowledge of the desert roads to continue to dominate the transport of goods into the province from central and southern Arabia.

The annexation of the kingdom, however, may well have opened some new opportunities for commerce to traders from outside the kingdom. While it would seem that there had never been a prohibition on Roman traders operating within the kingdom, the annexation seems to have provided some reason for Egyptian merchants to make the trip to Bostra soon after the incorporation of the kingdom into the
province. As mentioned earlier,\textsuperscript{266} soon after the annexation the legionary Julius Apollinarius related in a letter to his relatives in Egypt that merchants were arriving from Pelusium at Bostra every day.\textsuperscript{267} It would seem, then, that these merchants were taking advantage of some new opportunity in the former Nabataean realm which was made possible by the recent imposition of direct Roman rule. Although we are not told that these merchants were involved in the incense trade, nor indeed what the new opportunity which they wished to exploit actually was, nonetheless their interest shows that there was at least a reasonable amount of commercial activity in the Roman province of Arabia at this time. Given the fact that they had come a long distance it is also reasonable to assume they were interested in a relatively lucrative trade, and the incense traffic would of course be the prime candidate for this.

It is also noteworthy that the area of their interest was Bostra, which lies at the head of the route up the Wadi Sirhan, to which goods from the eastern seaboard of Arabia were carried. This area seems to have gained in importance toward the end of the first century A.D., to the point where it had become the effective centre of the Nabataean kingdom at that time.\textsuperscript{268} This increased importance may very well be a result of the shift of the trans-Arabian route so that it came up the Wadi Sirhan and terminated at Bostra, and as a result of this the merchants of Pelusium chose Bostra as their destination rather than Petra. However, all this must remain conjecture as we have no evidence other than the papyrus itself, which tells us no more than that these merchants existed.

\textsuperscript{266} III. 4 above.
\textsuperscript{267} P. Mich 466
\textsuperscript{268} A. Negev "The Nabataeans and the Provincia Arabia", 639.
Thus, we are again faced with a great paucity of evidence when discussing the merchants who traded in Arabian incense in the Roman period. If anything, they are perhaps even more anonymous than those of the preceding royal period. The only thing we can really surmise about the nature of these people in the Roman period is that they were very likely the same type of people who had conducted the traffic under the Nabataean kings, except that they now paid their dues and taxes into the Roman treasury rather than the Nabataean. As the Michigan papyrus indicates, there may have been some opportunity involved in the Roman takeover that attracted merchants from outside the province, but what that attraction might have been we cannot tell.

_The Economic Significance of the Trade_

The economic significance of the incense trade in Roman Arabia is difficult to gauge due to the small quantity of the evidence and the difficulty of reconstructing any ancient economy. Given the view taken here that the Romans interfered as little as possible with the conduct of the trade, we might expect that the economic significance of the trade in the Roman period to be broadly similar to that which it held in the preceding Nabataean period, particularly in the earlier era of imperial rule. This would seem to be borne out by the military dispositions of Roman troops in the province as outlined in the previous section, which shows the clear interest the Romans had in the continuation of the caravan trade, reflected in their initial disposition of troops in areas the caravans traversed.
However, we should also bear in mind that the economic impact of this trade was likely to be far more widely diffused under the Roman administration than it had been in the royal period. The wealth which had once accrued to the Nabataean throne by the imposition of dues and taxes would now have been siphoned into the imperial treasury, and possibly diverted to priorities of the imperial government outside Arabia. Thus, the amount of money from the trade remaining in Arabia might have been substantially reduced under the Romans, even though the actual incoming funds might have been the same as before. Similarly, if a greater part of the trade were now in the hands of merchants who had come in from Egypt or elsewhere, we might also expect that a greater proportion of the profits of the trade would leave the province than had been the case under the Nabataean kings.

Thus, although there is actually very little available information, it would seem most probable that the immediate economic effect of the Arabian incense trade in the Roman period was somewhat reduced from that in the Nabataean period. This is the case even though the Roman military dispositions in the province show that the trade was still a significant factor: the main difference was that the funds accrued from the exploitation of the routes now went into the imperial treasury rather than to the royal treasury in Petra or Bostra, so they were not then available for redistribution to the populace by the normal economic means of euergetism or other channels of royal expenditure.

The economic significance of the incense trade would probably have been reduced still further in the later period. We have already seen clear indications that the security situation in the province deteriorated markedly during the third century, at a
time of severe economic pressure.\textsuperscript{269} In such circumstances the economic impact of
the trade, both reduced in volume due to economic factors and fraught with greater
danger due to the unrest within the province, can only have been seriously impaired.
Only with the re-establishment of peace and security under the Tetrarchy and
Constantine can we expect that this situation can have improved. Indeed, Eusebius
notes in the early fourth century that 'Aqaba was being used for trade with India,\textsuperscript{270}
and so it is possible that this trade had replaced some of the earlier significance of the
Arabian incense traffic. However, any such significance is difficult to find in the
archaeological record from this time. While the province does appear to have enjoyed
some sort of a renaissance in the later period through to Byzantine times, this
renewed prosperity seems to have been firmly based upon agriculture, whereas the
stations associated with the incense trade (apart from 'Aqaba) seem to have been
deserted by this time. It appears that during this period a far greater area of the
province was being placed under cultivation, as is demonstrated by the extensive
remains of farms and related establishments from the fourth century and later.\textsuperscript{271}
Thus, given the greater proportion of the province under cultivation and the probable
decline in the overall volume of long-distance trade due to economic factors, the
overall economic impact of the trade upon the province must have been greatly
reduced. It is impossible to quantify to what extent the trade continued to be
significant at any time, but would appear that in the later period its significance was
considerably less than it had been.

\textsuperscript{269} III. 5 above.
\textsuperscript{270} Eusebius \textit{Onom.} VI. 17-21
\textsuperscript{271} D.F. Graf "Rome and the Saracens", 388-389.
Conclusion

It would thus seem, from the little evidence which can be gleaned, that the Roman administration in Arabia had a roughly parallel interest in the trade there as did the Romans in Egypt, although there of course the trade is much better documented. Generally speaking, the Romans were interested in protecting the caravans in order that they might continue to pay their taxes and dues. Accordingly, they made no attempt to disrupt or direct the traffic, simply placing their protective forces on the same stations as had been occupied by the Nabataeans before them.

Once again, as is the case with Egypt, it should be emphasised that this interest in the trade cannot be considered evidence of a proactive trade policy on the part of the Romans. All they appear to have done was replace units of Nabataean troops which were guarding the caravans with their own soldiers, thus ensuring that the revenue from taxes and dues continued to flow into the treasury. There is no evidence of any attempt to establish new routes or to channel the trade in any way; the Romans only ever seem to be interested in protecting what they already have, not in deliberately encouraging new developments.

In line with this view of the Roman attitude to the caravan traffic, we would expect that they would have interfered as little as possible with those who were carrying the trade, allowing the same Nabataean and foreign merchants to continue the trade as had been engaged in it during the royal period. While it may have been the case that there was something of an influx of merchants from outside Arabia after the Roman annexation, we still do not have to postulate a wholesale replacement of
Nabataean merchants by outsiders at this time. Rather, if the Romans wanted to continue to collect the taxes paid by the caravans, as they certainly seem to have done, then it would make much more sense to leave the trade as much as possible as it was when they first encountered it.

The economic significance of the trade within the province, however, can only have been reduced from the situation in the royal period due to the wider diffusion of the revenues gained from the trade. The money formerly accruing to the royal treasury would now have gone to the imperial one, and consequently the localised effect of this money on the economy of the province would be removed. This effect would have been exacerbated by the third century when there may have been a decline in the trade, accompanied by a greatly worsened security situation which necessitated the construction of extensive military facilities in the province. However, the evidence from 'Aqaba shows that the trade survived in some form, and so we must assume that it continued to have some significance. Nonetheless, Petra's days as a 'caravan city', to whatever extent that term had ever been appropriate, had probably long ceased by end of the third century A.D.

III.7 Arabian Trade under the Severans and Later

As has already been noted, while the primary literary sources make several mentions of the Arabian incense trade in the period prior to the Roman annexation of Arabia, there are no parallel reports of this trade in the imperial period. While some might take this as evidence that the trade had ceased at this time, we must be very cautious of such arguments from silence. We might also consider the fact that
Palmyra's international trade is only mentioned in one literary source, and that referring to the first century B.C.\textsuperscript{272} The epigraphic evidence, however, shows that the trade was very significant and peaked in the second century A.D., so it is clear that the absence of any literary references proves nothing. It is altogether possible that the situation is the same in Arabia, and we may surmise that the incense trade continued as long as the demand for the commodities remained strong.

\textit{Trade in the Severan Period}

There is, in fact, one brief literary reference from this later period to the incense trade, but this very confused reference from Herodian only tells us that incense was still being exported from Arabia Felix to the Roman Empire in the later period.\textsuperscript{273} What it does not tell us is whether the incense was being carried overland through the Hejaz and then through Petra or by sea direct to Egypt and then to Rome through Alexandria. Thus, we cannot tell from this reference alone whether or not the aromatics trade from Arabia Felix was still passing through the province of Arabia. We can however learn that the demand for these aromatics was still present in the Empire and thus merchants would have continued to find a market for their goods. Indeed, given the religious significance of these incenses in the ancient world it is hardly surprising that the demand did continue. Of course, if all the trade by this time passed through the Egyptian Red Sea ports then the trade would no longer have been of any significance to Roman Arabia. There are reasons, however, for concluding that this was not the case.

\textsuperscript{272} Appian \textit{BC} V. 9

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There is reason to believe that the land-based incense trade was able to survive against competition from cheaper seaborne transport due to the ability of the land-based merchants to get their incense to the markets before the ships could leave Arabia Felix. The continued existence of this trade was confirmed by the Nabataean and then Roman occupation of the station of Hegra, located on the incense road from Arabia Felix. As was noted earlier, the majority of the Roman military inscriptions there have been dated to the later second century, and the occupation of the site by the Romans seems to have persisted until the time of Caracalla, which in the absence of any other valid reason for the occupation of such posts in the deep desert would indicate that there were still incense caravans using this route which required protection as late as the Severan period.

There is also evidence of Severan garrisoning of the deep desert in the Wadi Sirhan, which has already been noted as a route whereby trade may well have entered the province of Arabia. Archaeological and inscriptionsal evidence from the Wadi suggests that there was considerable activity there in this period, especially at the Azraq oasis. Severan milestones dating from A.D. 208-210 have been found on a road leading north from the oasis, and Latin building inscriptions of 200 and 201 give evidence of Severan occupation in the small fort at Qasr el-Uweinid near the Azraq oasis. In addition, aerial photographs of Azraq itself show the remains of an older,
larger fort beside the Tetrarchic building standing today at the site. It is reasonable to assume that this fort would have also dated from the Severan period, as the small fort at Qasr el-Uweinid would have been completely untenable without a garrison at Azraq also.

However, this attention does not seem to have been confined to the Azraq oasis and the roads leading to it. There is also evidence that at various times, most probably in the Severan and also later in the Tetrarchic period, the Romans patrolled in some way the entire length of the Wadi Sirhan as far as Jawf. An inscription, found at Jawf itself, was set up by a centurion of the *legio III Cyrenaica* as a dedication for the wellbeing of two *Augusti*. Although the emperors are not named, the formula used in the inscription is characteristic of the second century, so the most likely candidates would be Lucius Verus and Marcus Aurelius (A.D. 161-169), or Septimius Severus and Caracalla (A.D. 197-211). In view of the Severan date of the fortifications at the northern end of the wadi at Azraq, we might consider the second date to be more likely. In either case, this inscription provides evidence of Roman activity far into the Arabian desert at this time.

That this activity most probably took the form of patrols along the length of the Wadi Sirhan is made probable by another inscription found at Azraq which seems to describe the entire route of the road. This inscription, according to the most recent reading, reads:

[D.n. Diocletiano . . . ]

281 M.P. Speidel “The Roman Army in Arabia”, 694; G.W. Bowersock *Roman Arabia*, 98. For the text of the inscription see D.L. Kennedy *Archaeological Explorations*, 190, no. 39.
per mil. fortiss. suos
legg. XI Kl. et VII Kl.
et I Ital. et IIII Fl. et
I Ill., praetensione
coligata mil. suis ex
leg. III Kyr. A Bostra
Basianis m. p. LXVI et
a Basienis Amat. LXX
et ab Amata Dumata
m. p. CCVIII.

Diocletian . . . by his brave soldiers of the legions XI Claudia, VII Claudia, I Italica, IIII Flavia and I Illyricorum, linked by outposts to his soldiers from the legion III Cyrenaica, From Bostra to Basianis 66 miles, from Basianis to Amata 70 miles, and from Amata to Dumata 208 miles.²⁸²

This inscription seems to be describing a patrol area or series of outposts linked along the road passing down the Wadi Sirhan from Bostra to Dumata, the ancient name for Jawf. Speidel’s interpretation is that the posts are to be understood as linked in a chain,²⁸³ whereas Kennedy and MacAdam believed the inscription gave distances from a fixed point, Dasianis, which they equated with Azraq.²⁸⁴ Speidel’s interpretation is to be preferred simply because the earlier interpretation called for the route to end at an unattested place called Bamata Dumata, located at the end of the Wadi Sirhan but still some seventy Roman miles short of the known site of Jawf. Speidel’s interpretation, by contrast, correctly gives the distance between Azraq and Jawf and ends the route at the oasis of Jawf instead of in mid-desert, as logic would dictate.

²⁸² M.P. Speidel “The Roman Road to Dumata (Jawf in Saudi Arabia) and the Frontier Strategy of Praetensio Colligare” Historia 36 (1987), 215-219. This reading differs from the earlier one (D.L. Kennedy and H.I. MacAdam “Some Latin Inscriptions from the Azraq Oasis”, 100-104) in several points, the most significant of which are: concata for colligata in line 6, Dasianis for Basianis in line 8, a Basienisa m p XXX for a Basienis Amat LXX in line 9 and a Bamata-Dumata for ab Amata Dumata in line 10. Essentially, Speidel’s reading gives a series of posts along the road, whereas Kennedy and MacAdam’s describes distances from one fixed point, Dasianis (Azraq).

²⁸³ M.P. Speidel “The Roman Road to Dumata”, 218-219.
Nonetheless, either interpretation shows clearly that the Romans were maintaining outposts and/or patrols, presumably the meaning of the obscure term *praetensio*,\(^{285}\) along the road during this period. Although this inscription dates from the Tetrarchy,\(^{286}\) the presence of a Roman centurion at Jawf in the Severan period as noted above, coupled with the known Severan activity in the Azraq area, makes it more than likely that some similar patrolling arrangement must have existed in the Severan period also. This too, like the outpost at Medain Saleh discussed earlier, would seem to indicate that the Romans had some interest in the deep desert in the Severan period. The logical question to arise from this fact is: What was that interest, and was it at all associated with the caravan trade?

*The Severan Garrisoning of the Desert at Jawf and Medain Saleh*

Some scholars have suggested that the patrols into the desert areas which were instituted in the reign of Severus were purely military in character, and had nothing to do with trade which may or may not have been using the routes in the area. These have generally suggested that the Wadi Sirhan was blocked by the Severan fortifications because of the use of the wadi as an invasion route by tribes living in the interior.\(^{287}\) Indeed, it is pointed out that the wadi has been a popular route for raiding

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\(^{284}\) D.L. Kennedy & H.I. MacAdam "Some Latin Inscriptions from the Azraq Oasis", 101-103.

\(^{285}\) M.P. Speidel "The Roman Road to Dumata", 219-220.

\(^{286}\) Ibid., 216.

parties even up until this century.\textsuperscript{288} It has also been pointed out that these Severan posts in the desert are parallel to similar posts in Africa,\textsuperscript{289} which might indicate that they were part of a general program of advanced patrols in desert regions of the Empire rather than specifically related to the Arabian caravan traffic.

It would be foolish indeed to deny any association of the forts in the Wadi Sirhan with the general security of the area. No doubt one of the purposes of these forts was to deny the use of the oasis and consequently the route which passed through the oasis to any desert raiders who might desire to use the route as a thoroughfare into the settled area of the province. Although the problem of Saracen raiders was not as severe as some would make out, it still unquestionably existed. It would seem more than likely that the placing of these posts was in part at least to promote the security of the region and to suppress banditry and raiding in the settled area of the province.

This is reflected also in the posts in the desert of North Africa which date from this time.\textsuperscript{290} These too are placed at oases in the desert on approach routes to the settled area of the province, and can rightly be seen as parallels to the Severan occupation of the oasis at Azraq and blocking of the northwestern end of the Wadi Sirhan. It would seem from this that Septimius Severus instituted a general policy of

\textsuperscript{288} D.L. Kennedy \textit{Archaeological Explorations}, 71.
\textsuperscript{289} D.L. Kennedy "The Frontier Policy of Septimius Severus", 880; G.W. Bowersock \textit{Roman Arabia}, 121.
denying these routes and oases to tribes who might use them to attack both Roman troops in the area and the sedentary inhabitants of the respective provinces.

Nonetheless there are several reasons for thinking that, beside these general considerations, there were factors at play in Arabia which were specific to that area and which influenced the desert posts established there in the Severan period. While it is true that the posts at places like Azraq seem to be parallel in function to the posts in North Africa, the same cannot be said for places such as Dumata or Hegra. While the North African posts are indeed deep in the desert and remote from the settled area of the province, they are nowhere near as remote as Jawf or Medain Saleh. For example, the post at Castellum Dimidi in Mauretania Caesarensis is approximately 250km from the coast, whereas Jawf is over 400 km from Azraq, which is itself only a fort, and nearly 500 km from Bostra, the nearest significant city.

It might be argued that the posts in the Wadi Sirhan were advance posts for the troops at Azraq, but it is difficult to imagine that they needed to be quite so far in advance! Indeed, if the sole intention of the Romans was to prevent the use of the Wadi Sirhan by invading raiders, then the fortification of the Azraq oasis would have sufficed for this admirably, as it would deny the use of the oasis to the raiders and block off the Wadi as an access to the province. If there was nothing in the Wadi itself that the Romans were interested in, then it would seem pointless to patrol the entire length of the road and deny the use of Jawf to the nomads when they could be effectively blocked by the forts at Azraq without the additional expense and effort of maintaining a presence in the Wadi Sirhan itself. There would be no need for patrols along the road or the establishment of a remote post at the oasis of Jawf to achieve
this end. Rather, the patrolling of the whole road suggests that there was something of value using the road, and that the Romans wished to protect it.

The previous history of the Wadi as a trade route, shown by the Nabataean garrisoning of Jawf,\(^{291}\) makes it perfectly clear what this interest would have been: the incense traffic from Arabia Felix.\(^{292}\) Only the need to protect traffic along this route can account for a Roman presence so far into the desert, and in the absence of any official Roman traffic or communications in the Wadi the incense caravans are the only traffic which could have required such protection or have been worth the Romans' while to protect. Thus, the posts at such places as Jawf and Medain Saleh cannot be considered as parallels to the Severan desert posts in Africa, as in Arabia there was an already well-established history of usage at these oases which is absent at the posts in Africa. This history must be taken into account when these places are examined and an explanation for their garrisoning sought.

There is also the possibility that as well as the traditional incense trade there also arose in the Severan period a new trade in the Wadi Sirhan which may have increased the value of this route still further to the Romans. As will be discussed in the next chapter, the trade of Palmyra in spices and silks from India rose to great prominence in the second century A.D. However, in the periods when Rome and Parthia were at war, it would appear that this trade suffered interruption,\(^{293}\) and accordingly the merchants would have been obliged to seek another route by which their wares could be transported to the Mediterranean. The direct overland route

\(^{291}\) See III. I above.

\(^{292}\) M.P. Speidel "The Roman Road to Dumata", 213. It should of course be noted that the same arguments apply to the post at Medain Saleh.

\(^{293}\) See IV. I below.
between the Gulf and Arabia which passed through the oasis of Dumata (and consequently well clear of Parthian lands and the theatre of war between Rome and Parthia) would have been an ideal alternative to the Mesopotamian route. Thus it may be that during the Severan wars against Parthia the disrupted caravan traffic began to use this route and enter the Roman Empire by means of the Wadi Sirhan, prompting the Romans to increase their protection of the wadi.\textsuperscript{294} While this must remain pure speculation, it is at least possible that this trade would account for the increase of interest in the wadi in the Severan period, and also possibly help to account for the apparent Palmyrene attack on Bostra and the \textit{legio III Cyrenaica} in the course of the Palmyrene revolt of the later third century.\textsuperscript{295}

In any case, whether the trade in the Wadi Sirhan was still only the Arabian incense traffic or whether it had been reinvigorated by redirected trade from the Gulf as well, there is a reasonable case to be made for the continuing importance of the trade in determining the Roman garrisoning of the desert in the Severan period. Of course, this does not have to be attributed to any far-sighted economic policy but simply to the desire of the imperial government to collect the taxes which accrued to it from the traffic. We should continue to distinguish carefully between Roman \textit{direction} of caravan traffic (which has not been convincingly demonstrated in any area) and Roman \textit{reaction} to new developments in the traffic. In the absence of any clear indication that the Romans attempted to divert or direct the caravan traffic at any other time, we should assume that the redirection of the incense trade to the Wadi

\textsuperscript{294} D.L. Kennedy \textit{JNES} 50 (1991), 76. Again, we probably should not think of this as an attempt by the Romans to provide proactively an alternative route for the traffic so much as a reaction to the use of the Wadi Sirhan by merchants in need of an alternative to the Palmyrene route. Thus, when the
Sirhan was done by the merchants themselves seeking a less vulnerable route to bring their merchandise into the Empire.

From this it would seem that the incense traffic was still alive and well in Arabia during the Severan period, and may indeed have been supplemented by caravans carrying Indian and Chinese goods arriving from the head of the Arabian Gulf. However, after the close of the Severan period, the third century brought a severe political crisis in the Roman Empire which appears to have had very serious economic repercussions. What those repercussions were for the Arabian incense trade will be discussed below.

Arabian Trade in the Third Century

As has already been discussed, it appears that the political crisis of the third century had grave economic results throughout the Roman Empire. In all areas of the Empire there is evidence that the economy stagnated and money in particular lost its importance as a means of exchange, due to severe devaluation by the government.\textsuperscript{296} In these circumstances, it would be hardly surprising if such a capital-dependent activity as the long-distance trade were not badly affected, and indeed there is evidence, already discussed in the chapter on the trade in Egypt, which seems to indicate that long-distance trade slowed to an extent at this time. Given this, it would perhaps be reasonable to consider that the Arabian incense trade might have suffered at this time also. In a time of financial difficulty and monetary inflation it would no doubt become merchants began to use the wadi in greater numbers the Romans simply increased their garrisoning to ensure that the caravans reached Roman territory (and paid their taxes) safely. \textsuperscript{297} See IV. 5 below.
increasingly difficult to purchase these expensive commodities, and so much of the market for the aromatics of Arabia must have been lost or at least sufficiently affected as to make the trade far less viable than it had been in the earlier period of Roman rule.

There is indeed some evidence from Arabia which would seem to confirm this, and to show that the overland incense traffic succumbed at least in a large part to the increasing costs and decreasing market of the trade in the third century. The first piece of evidence is the apparent abandonment of the post at Medain Saleh at the beginning of the third century. The Greek and Latin graffiti at the site referring to Roman military occupation have all been dated no later than the early third century, while the absence of the imperial *nomen* Aurelius in any of the inscriptions would seem to indicate that occupation had ceased by the time of Caracalla.\(^{297}\) Certainly there are no later inscriptions, and the site is not mentioned in the *Notitia Dignitatum* and so was presumably abandoned by the fourth century. Thereafter, it was probably left to the supervision of local Arab phylarchs with very limited imperial control.\(^{298}\)

It would seem most likely that the military post at Hegra ceased to be of sufficient value to maintain the garrison there by the end of the Severan period, and that the Romans never again considered it worthwhile to send troops there. It has already been argued that the only plausible reason for the existence of this remote post (900 km from the legionary base at Bostra) was the protection of the incense caravans travelling up from Arabia Felix and the collection of their tolls. Accordingly, it is very likely that the removal of the garrison there may be as a result of a significant decline in the incense traffic passing through the station, most probably

\(^{296}\) See II. 6 above.
\(^{297}\) D.F. Graf "Qura ‘Arabiyya", 194.
brought about by the increasing seriousness of the financial situation in the third century and the consequent lack of silver and gold bullion with which to purchase the goods.

These same economic difficulties, coupled perhaps with the decline in income from the incense traffic, seem to have caused some decline in the city of Petra itself at this time. There is some evidence that the inhabited area of Petra was reduced somewhat in this period, particularly on the North side of the city. It is certainly possible that this decline was caused by the economic factors which were causing difficulty throughout the empire at this time. It is even possible that in the case of Petra this problem was exacerbated by the fact that a higher proportion than normal of the city’s finances was derived from the incense trade rather than agriculture. Thus, any decline in the incense trade, as seems likely from the evidence at Medain Saleh, might have had a more severe economic effect on Petra than on other cities less involved with the trade. Of course, there is no doubt that many other factors would have come into play in determining what happened to Petra, but a decline in the incense traffic cannot be entirely dismissed from these reasons.

Particularly when compared with similar evidence from Egypt of a decline in the volume of trade in the third century, it would seem quite likely that the international ‘luxury’ trade of the Roman Empire suffered a considerable downturn in the third century, and that the Arabian incense trade was no exception to this rule. When the shortage of bullion which seems to have been endemic at the time is considered, and perhaps also the rampant political instability, it becomes clear why

298 M. Sartre Trois études, 132.
this downturn would have occurred: the items of this trade were of very high value and often could not be practically traded except for bullion, and similarly at a time of economic pressure the markets for these items would no doubt be dramatically curtailed. Thus, in the third century we see evidence of a reduction in the volume of trade as well as the interest of the Roman authorities in protecting the reduced traffic.

Recovery under the Tetrarchy

The situation does not seem to have remained so grim for long, however. After the political crisis of the third century had been ended, there is considerable evidence for the recovery of Roman Arabia in both agriculture and trade. As we have already seen, this was also accompanied by a great expansion in the garrisoning of Arabia and by the construction of an impressive system of fortifications in the area, so it is clear that there was still some considerable unrest or fear of invasion in the province. Nonetheless, there are still indications that trade began once more to flow along the caravan routes of Arabia, and that the cultivated and populated area of the province was dramatically increased during the Tetrarchic era.

In the area of trade, in particular, two important locations stand out. One is the Wadi Sirhan, which has already been described in connection with the Severan activity in the region. As noted in the discussion of that topic above, an inscription from the reign of Diocletian attests to the existence of a Roman patrol along the wadi as far as Jawf, some 400 km from Bostra. This is a clear indication that the wadi was being used as a communication route of some sort, and moreover as one that the

299 P.J. Parr "The Last days of Petra" in M.A. Bakhit & M. Asfour (eds.) Proceedings of the
Romans sought to protect. As was the case in the Severan period, this would most probably indicate that the Wadi Sirhan was in use as a means of bringing both Arabian incense into the province as well as goods from India and further afield which had formerly been carried over the route through Palmyra until the destruction of that city in A.D. 272.

Another locality which seems to have risen in importance during the Tetrarchic period is the port of Aila, now known as 'Aqaba. While in earlier periods Aila may have been overlooked as a port for the Red Sea traffic due to the prevalence of northerlies in the Gulf of 'Aqaba which would have made navigation difficult, it would seem that by the later third century and certainly by the fourth century Aila was in use as a port for the Red Sea trade. At the beginning of the fourth century, Eusebius recorded that Aila was in use for this purpose, and had been allotted a substantial garrison, consisting of the Legio X Fretensis which was transferred there from Jerusalem.\(^{300}\) It would seem probable from this reference that Aila increased in importance as a port at some time in the late third or early fourth century, and at the same time the Legio X Fretensis was moved there from its earlier base at Jerusalem.

Whether or not this posting was due to the increasing port activity or as part of the increase in the garrison of Arabia as a whole which occurred during this period is difficult to say, but recent archaeological investigations at the site have shown the large scale of both commercial and military activity at Aila in the later classical

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\(^{300}\) Eusebius *Onom.* VI. 17-21

*Symposium on Bilad es-Sham during the Byzantine Period* (Amman 1986), 200, 203.
Although there is evidence at the site for occupation and commercial traffic from the first through to the fourth centuries, the bulk of the datable physical remains at Aila are from the fourth century, pointing to this period as the peak of commercial activity at Aila.

This increase in the importance of Aila seems to be roughly synchronous with the rise in significance of the port of Clysma in Egypt as detailed earlier. As was described in the discussion of Clysma, this may well have been related to the destruction of Coptos by Diocletian in the late third century, which would have effectively ended, at least temporarily, the commercial importance of Myos Hormos and Berenike. It would seem, therefore, that both Clysma and Aila were able to profit by the eclipse of the older Red Sea ports and began to receive the cargoes which were being brought by sea from both India and Arabia. Thus, despite the difficulty of navigating the northern reaches of the Red Sea, it would seem that the removal of the Nile emporium of Coptos made the former trade route to the Nile from Berenike untenable, and so the merchants were forced to sail further up the gulf to use the ports of Clysma and Aila. Accordingly, we find these ports were the most prominent in the India trade at the beginning of the fourth century.

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302 Ibid., 30.
303 For example, datable coins in the 1994 excavations were almost exclusively from the fourth and fifth centuries (Parker “Preliminary Report”, 32-34); important fortification works (probably related to the posting of X Fretensis at this site) date from this period (Ibid., 35-37, 40); and a small cemetery which was uncovered near the city consists entirely of tombs from the Early Byzantine (i.e. 4th - 5th century) period (Ibid., 32). The coincidence of these results with literary references to commercial activity in the Byzantine period (Eusebius Onom. VI. 17-21 [fourth century]; Procopius BP I. 19 and Antoninus Placentius CCSL 175, p. 149, [both sixth century] all refer to maritime trade between Aila and India) strongly indicates that Aila became a port of major importance in the eastern trade in the fourth century, although there may well have been some trade before that date.
304 II. 6 above.
Conclusion

The pivotal time in the history of the incense trade in Arabia would thus appear to be the third century. During the political and economic crisis of that century the nature of the trade changed dramatically: prior to that time the incense route from South Arabia seems to have continued to function, supplemented perhaps in the Severan period by Indian and Persian goods being brought via the Wadi Sirhan to avoid the wars which blocked off the routes through Mesopotamia. Much of this trade seems to have been brought to a standstill by the poor economic conditions of the third century, however, and when the situation improved again under the Tetrarchy many things had changed. By this time the two main routes in use seem to have been the Wadi Sirhan, now carrying trade which formerly would have passed through Palmyra, and Aila, receiving goods from India and Arabia which before had gone to the Egyptian Red Sea ports.

Despite this change, however, it would seem that the spice, incense and silk trade continued to be of some importance in the Roman province of Arabia throughout the Severan period and for many years afterward. Indeed, it is known that Aila continued to be a port of significance in these trades throughout the Byzantine and Islamic periods, so perhaps the rise in importance of that port in the late third century established a pattern that would endure for many centuries. It cannot be doubted, then, that throughout the whole period of its administration by the Romans the province of Arabia continued to be an important thoroughfare for the spices, silks
and incense of the East, and that this rich trade cannot but have had some significant social and political effects upon that province.

III.8 Conclusion

All in all, the incense trade appears to have been a quite significant factor in the Nabataean kingdom and in the Roman province of Arabia which succeeded it. Despite the fact that, in many ways, our research is hampered by a lack of evidence, particularly with respect to the organisation of the trade and its participants, it is still possible to reach certain conclusions about the Arabian incense trade in the Roman and Nabataean periods, as well as some of the effects it may have had on the province.

The Nabataean kingdom in particular, at least in the period that it still existed as an independent state, seems to have derived much of its income from the incense traffic. It certainly seemed to have been the opinion of the ancient writers that this was the case: Diodorus, for instance, explicitly ascribed the pre-eminent wealth of the Nabataeans to their participation in the incense trade, and although other writers mentioned other sources of income none of them contradict Diodorus' view. It should also be noted that these literary references only ever refer to the trade in Arabian incense, and consequently we must reject the notion that Petra was involved in any significant trade with China or India. The evidence for these is precisely nothing.

There are, however, significant literary references which when combined with archaeological research can allow us to reconstruct some of the trade routes by which the frankincense and myrrh of Arabia reached Petra, as well as the manner in which
the trade was conducted, although of course these must all be tentative conclusions given the nature of the evidence. Nonetheless, we can with reasonable confidence reconstruct a network of trading routes converging upon Petra by which the incense from Arabia was carried to the Mediterranean markets.

The coming of the Romans must inevitably have caused some disruption to this trade, but we have seen that the frequently stated idea of deliberate Roman action, whether military or economic, to destroy the trade of the Nabataean kingdom must be rejected. There may well have been some reduction in the amount of trade which was passing through Leuke Kome, but this should be attributed to the greater convenience of the journey through the Egyptian Red Sea ports, not to any direct government interference.

Throughout the period of royal rule, the Nabataean kingdom experienced considerable political effects as a result of the incense trade. The kingdom most probably accrued considerable profit, both to private individuals and to the king, as a result of the trade and the customs duties which came with it. This led the Nabataeans to shape their foreign policy, particularly their activities in the Arabian desert, according to the needs of the caravan trade. Accordingly, important military stations were set up at various points, including what appears to have been a significant military and commercial colony in the Hejaz at Medain Saleh. In addition, the Nabataean authorities constructed the port at Leuke Kome, probably to compete with the Egyptian Red Sea trade, and maintained facilities for the caravans at various points throughout the kingdom.
The Nabataean kings thus seem to have played a proactive role in the caravan trade, as shown by their attempts to direct the traffic (e.g. Leuke Kome) and the expansion of the kingdom in such places as the Hejaz and the Wadi Sirhan, both of which seem to have been occasioned by the needs of the caravan trade. In addition, the revenues which accrued to the state as a result of the trade seem to have made a significant difference to the overall fortunes of the kingdom, as can be seen today in the architectural remains of Petra and other Nabataean sites. All in all, the political ramifications of the Nabataean incense trade seem to have been considerable during the royal period.

After the Roman takeover, the distribution of revenues gleaned from the trade by the state would have been more widely dispersed, leading to a reduced impact on the province itself. Nonetheless the customs duties and taxes imposed by the state meant that the trade represented a significant source of income for the Roman treasury, and the Romans took steps, just as they did in Egypt, to ensure that this source of wealth was kept safe from banditry and other disturbances.

This protection, however, appears to have been as far as the Romans were prepared to go in their involvement in the trade. There is no evidence that the annexation itself, or any of the other Roman military activities in the area, were ever occasioned by the incense trade. The Romans’ relationship with the incense trade was strictly reactive: they acted only to secure and protect a source of direct income to the state, never to enrich the merchants themselves particularly or to directly influence the course of the trade. Indeed, there is nothing in the Roman attitude to the Arabian incense trade which could be dignified by the term ‘economic policy’ at all.
Throughout the years of Roman rule the incense trade retained some importance, but it was never allowed to dictate Roman policy in the area other than the need to police the trade routes and protect the tax income. By the later period the significance of the trade was eroded still further by the dire economic position of the empire in the third century, but nonetheless the trade appears to have continued at least to some extent. However, the reduced significance of the trade and the larger area of the province devoted to farming activities in the fourth century and later can only have meant that the overall significance of the trade was considerably reduced by that time.

In conclusion, then, the Arabian incense trade can be seen to have had a steadily decreasing significance throughout the period under discussion. Even at the height of its importance under Roman rule, however, there is no evidence that its existence ever concerned the Romans enough to modify their foreign policy or any other aspect of their administration. As with Egypt, only in the area of their direct income from customs duties can the Romans be discerned as having an interest in the trade. Even then, only in the matter of protection of the routes (and therefore their taxes) can the Romans be seen to have acted in any way upon the caravan trade. Although there is no direct evidence pertaining to Arabia, parallels from other areas would indicate that when other policy imperatives (such as aggression against a foreign enemy) came into play, the caravan trade was a very low priority indeed.